



September 23, 2008

Ms. Rebecca Doolittle
US Bureau of Land Management
82 East Dogwood
Moab Utah 84532

Re: **2007 Waste Rock Monitoring Report.** Lisbon Valley Mining Company LLC. 920 South County Road 313, La Sal, Utah, 84530.

Dear Rebecca:

This Waste Rock Sampling Report (the 2007 Report) has been prepared in accordance with the Lisbon Valley Mining Co (LVMC) 2005 Waste Rock Sampling Plan (the Sampling Plan).¹

The 2007 Report documents waste rock characterization, handling, encapsulation, and pit bench mapping at the Lisbon Valley Mine (the Mine) in 2007.

The scope of work included the following:

- Waste rock sampling and analysis.
- Waste rock handling and encapsulation.
- Waste dump mapping.
- Pit bench mapping.

Background

Copper mineralization at the Mine is primarily comprised of oxide ore which occurs in the Cretaceous Burro Canyon Formation and Dakota Sandstone. Sulfide ores occur where these beds are buried under Quaternary alluvium and Cretaceous shale. The Mine stratigraphy is subdivided into 17 specific sedimentary beds.²

¹ LVMC 2005 Waste Rock Sampling Plan. Lisbon Valley Mining Company LLC. 20 December 2005

² Beaty D. 1975. Stratigraphy in the Centennial Pit Area. Appendix 2 5pp. from Summo USA, Corp.internal files

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Figure 1 identifies the LVMC system of bed nomenclature relative to the generalized section of sedimentary rocks exposed in the La Sal Utah Quadrangle. Copper ore occurs in Beds 3-15.

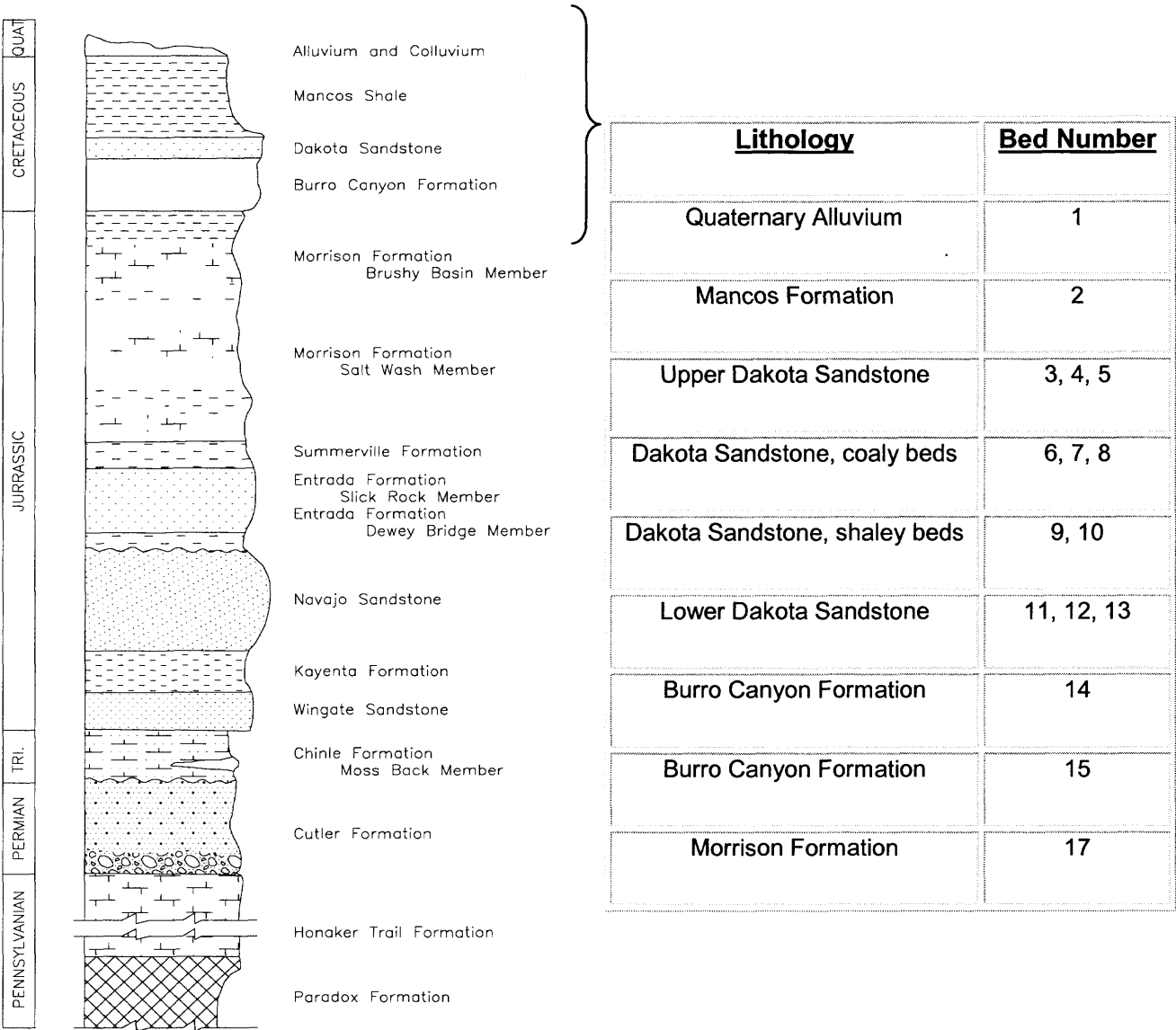


Figure 1
La Sal Stratigraphy and LVMC Bed Nomenclature

Beds 1-15 are grouped into seven rock types. The groupings are based on lithology and acid generation potential (AGP). Waste rock with AGP is derived from the lower carbonaceous facies of the Dakota Sandstone. This material is dark gray to black, and is visibly discernable by Mine personnel. Rock type designations are listed below.

Lithology	Bed Number	Acid Generation Potential	Rock Type Designation
Quaternary Alluvium	1	-	1
Mancos Shale Formation	2	-	2
Upper Dakota Sandstone	3, 4, 5	-	3
Dakota Sandstone, coaly beds	6, 7, 8	+	4
Dakota Sandstone, shaley beds	9, 10	+	5
Lower Dakota Sandstone	11, 12, 13	-	6
Burro Canyon Formation	14, 15	-	7
Navajo Sandstone.	NA	-	8

Table 1
LVMC Rock Type Designations

2007 Mining Activities

The LVMC mined approximately 9,089 kilotons (kt) of waste rock from three pits in 2007. Approximately 5,932 kt were mined from the Centennial pit, 986 kt were mined from the Sentinel West pit, and 2,171 kt were mined from the GTO pit.

Waste Rock Sampling and Analysis

In accordance with the Sampling Plan, waste rock samples were comprised of blast hole samples and composite bulk samples.

Blast hole samples were collected for acid/base accounting (ABA) using a sodium hydroxide back titration procedure.³ Composite bulk samples were collected to identify the potential dissolution of metals using the Meteoric Water Mobility Procedure (MWMP).⁴ The MWMP evaluates the dissolution of antimony, arsenic, uranium, cadmium, copper, molybdenum, selenium, and zinc by meteoric water.⁵

Sampling Locations

The Sampling Plan identifies eleven “standard” waste rock sampling locations; two in the Sentinel West pit, two in Sentinel East pit, five in Centennial pit, and two in the GTO pit.⁶

In 2007, active mining was conducted in three pits, GTO, Sentinel West, and Centennial. Samples were collected from each rock type mined in each of the pits closest to the “standard” sampling location. Standard sampling locations are shown on Figure 2.

³ EPA 1995. Available neutralization potential in mine samples by NaOH back titration. Modified version for commercial laboratory use. Method AL0242.

⁴ ACZ Laboratories, Inc., 2773 Downhill Dr., Steamboat Springs, CO 80487

⁵ Meteoric Water Mobility Procedure, Bureau of Mining Regulation and Reclamation, Nevada Division of Environmental Protection, 9/19/9

⁶ The “standard” sampling locations necessarily change as the pit benches step inward. An expanded discussion of sampling locations is included in the Sampling Plan.

2007 Waste Rock Sampling Results

The 2007 ABA results indicated a net acid neutralization potential ranging from 6-250 tons CaCO_3 /1000 tons waste (t/kt). The average of all results (2005-2007) is 32.86 t/kt. These results are comparable with previous studies, which indicate that the bulk of waste rock produced by the LVMC is strongly acid neutralizing.⁷

The 2007 MWMP results identified the antimony, arsenic, cadmium, copper, molybdenum, selenium, uranium, and zinc in the laboratory leachates. The detects and concentrations are comparable with 2005-2006 results. Detects are compiled in Table 2. Laboratory reports are attached as Appendix A.

2007 Waste Rock Placement and Encapsulation

All waste rock mined in 2007 was placed in Waste Dump B and C. A breakdown of rock types is compiled in Table 3.

Waste Dump As-Built Mapping

The LVMC plans, builds, and monitors its waste dumps in spatial coordinates using a Geographic Information System (MapInfo). The same process is used to document the placement of waste rock with AGP. As described earlier, these rocks (Rock Types 4 and 5) are dark gray to black and visibly discernable from the remaining (acid neutralizing) rock types.

LVMC maps the placement of this material on a quarterly basis. The location of waste rock types 4 and 5 are outlined as shape files in Figures 3 and 4.

Pit Bench As-Built Mapping

As-built maps of each pit are included in Appendix B. *Note these figures call out rock types by bed number.*

⁷ BLM 1997. Final Environmental Impact Statement Lisbon Valley Copper Project, February, 1997.

Summary and Conclusions

The LVMC handled approximately 9000 kt of waste rock in 2007. This waste was placed in Waste Dumps B and C.

The ABA results demonstrate that the waste rock mined in 2007 is overall acid neutralizing. These results correlate favorably with baseline ABA testing (BLM 1997). Similar to 2006 results and previous studies, the MWMP results identified the dissolution of metals, including antimony, uranium, cadmium, copper, selenium, and zinc in the sample extract.

The LVMC will continue to treat rock types 4 and 5 as acid-generating. All potential waste rock with AGP is either encapsulated, or will be encapsulated with neutralizing waste, clay, or neutralizing topsoil as part of final reclamation.

Please call Lantz Indergard at (435) 686 9950 #226 if you have any questions regarding this report.

Sincerely,



Lantz Indergard PG
Environmental Manager

cc. Paul Baker (UDOGM) Keith Eagan (UDEQ)



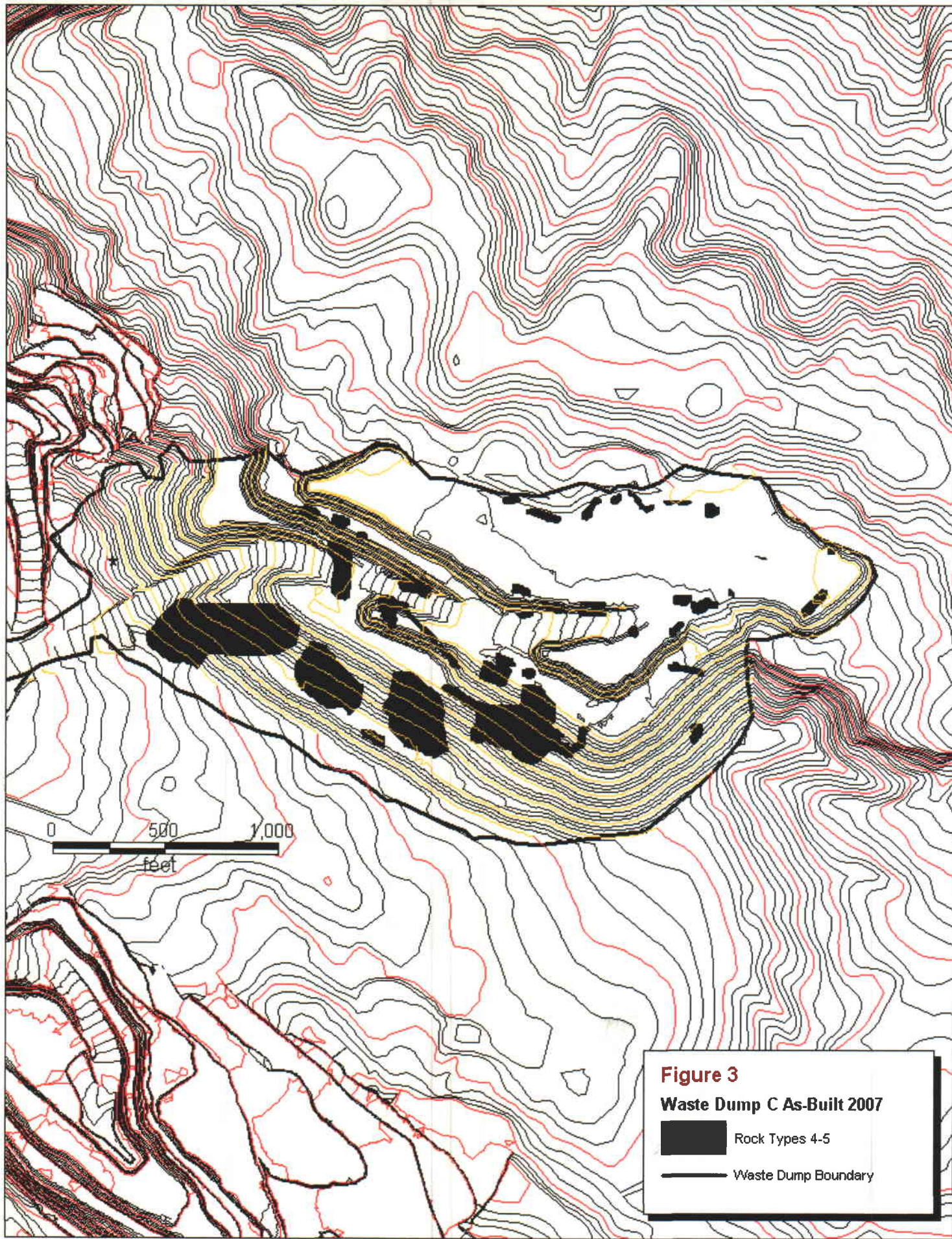




Figure 3

Waste Dump C As-Built 2007

-  Rock Types 4-5
-  Waste Dump Boundary

Appendix A

May 31, 2007

Report to:

Lantz Indergard
Lisbon Valley Mining Company, LLC
P.O. Box 248
La Sal, UT 84530

Bill to:

Lantz Indergard
Lisbon Valley Mining Company, LLC
P.O. Box 248
La Sal, UT 84530

Project ID:

ACZ Project ID: L62424

Lantz Indergard:

Enclosed are the analytical results for sample(s) submitted to ACZ Laboratories, Inc. (ACZ) on May 04, 2007. This project has been assigned to ACZ's project number, L62424. Please reference this number in all future inquiries.

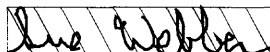
All analyses were performed according to ACZ's Quality Assurance Plan, version 11.0. The enclosed results relate only to the samples received under L62424. Each section of this report has been reviewed and approved by the appropriate Laboratory Supervisor, or a qualified substitute.

Except as noted, the test results for the methods and parameters listed on ACZ's current NELAC certificate letter (#ACZ) meet all requirements of NELAC.

This report shall be used or copied only in its entirety. ACZ is not responsible for the consequences arising from the use of a partial report.

All samples and sub-samples associated with this project will be disposed of after June 30, 2007. If the samples are determined to be hazardous, additional charges apply for disposal (typically less than \$10/sample). If you would like the samples to be held longer than ACZ's stated policy or to be returned, please contact your Project Manager or Customer Service Representative for further details and associated costs. ACZ retains analytical reports for five years.

If you have any questions or other needs, please contact your Project Manager.



31/May/07

Sue Webber, Project Manager, has reviewed and approved this report in its entirety.



Lisbon Valley Mining Company, LLC

May 31, 2007

Project ID:

ACZ Project ID: L62424

Sample Receipt

ACZ Laboratories, Inc. (ACZ) received 9 soil samples from Lisbon Valley Mining Company, LLC on May 4, 2007. The samples were received in good condition. Upon receipt, the sample custodian removed the samples from the cooler, inspected the contents, and logged the samples into ACZ's computerized Laboratory Information Management System (LIMS). The samples were assigned ACZ LIMS project number L62424. The custodian verified the sample information entered into the computer against the chain of custody (COC) forms and sample bottle labels.

Holding Times

All analyses were performed within EPA recommended holding times.

Sample Analysis

These samples were analyzed for inorganic parameters. The individual methods are referenced on both, the ACZ invoice and the analytical reports. The following anomaly required further explanation not provided by the Extended Qualifier Report:

1. For Antimony values flagged with an "N1", the ICSCA QC sample recovered high. Antimony was not detected on the samples so no further action was taken. All other QC was within control limits.

Lisbon Valley Mining Company, LLC

Project ID:

Sample ID: SENT W 6320BED6-8(A)

ACZ Sample ID: **L62424-01**

Date Sampled: 01/01/07 00:00

Date Received: 05/04/07

Sample Matrix: Soil

Metals Analysis

Parameter	EPA Method	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Antimony (MWMT)	M6020 ICP-MS		U	*	mg/L	0.0004	0.002	05/24/07 23:59	jjr
Arsenic (MWMT)	M6010B ICP		U	*	mg/L	0.04	0.2	05/25/07 14:36	msh
Cadmium (MWMT)	M6010B ICP	0.123		*	mg/L	0.005	0.02	05/25/07 14:36	msh
Copper (MWMT)	M6010B ICP	0.26		*	mg/L	0.01	0.05	05/25/07 14:36	msh
Molybdenum (MWMT)	M6010B ICP		U	*	mg/L	0.01	0.05	05/30/07 7:24	djt
Selenium (MWMT)	M6010B ICP		U	*	mg/L	0.04	0.2	05/25/07 14:36	msh
Uranium (MWMT)	M6020 ICP-MS	0.3430		*	mg/L	0.0005	0.003	05/29/07 18:12	jjr
Zinc (MWMT)	M6010B ICP	2.27		*	mg/L	0.01	0.05	05/25/07 14:36	msh

Soil Preparation

Parameter	EPA Method	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Meteoric Water	NDEP - MWMT, Sept. 19, 1990								
Mobility Extraction									
Dry Weight		4960			g			05/21/07 0:00	srs/brg
Extraction pH		6.24			units			05/21/07 0:00	srs/brg
Extraction Time		30.2			hrs			05/21/07 0:00	srs/brg
Leachate pH		4.06			units			05/21/07 0:00	srs/brg
Leachate Volume		5050			mL			05/21/07 0:00	srs/brg
Particle Size over 5 cm		44			%			05/21/07 0:00	srs/brg
Retained Moisture		15.1			%			05/21/07 0:00	srs/brg

Lisbon Valley Mining Company, LLC

Project ID:

Sample ID: CENT 6380 BED9-10(B)

ACZ Sample ID: **L62424-02**

Date Sampled: 01/01/07 00:00

Date Received: 05/04/07

Sample Matrix: Soil

Metals Analysis

Parameter	EPA Method	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Antimony (MWMT)	M6020 ICP-MS		U	*	mg/L	0.0004	0.002	05/25/07 0:12	jjr
Arsenic (MWMT)	M6010B ICP		U	*	mg/L	0.04	0.2	05/25/07 14:39	msh
Cadmium (MWMT)	M6010B ICP	0.887		*	mg/L	0.005	0.02	05/25/07 14:39	msh
Copper (MWMT)	M6010B ICP	1.52		*	mg/L	0.01	0.05	05/25/07 14:39	msh
Molybdenum (MWMT)	M6010B ICP		U	*	mg/L	0.01	0.05	05/30/07 7:41	djt
Selenium (MWMT)	M6010B ICP	0.04	B	*	mg/L	0.04	0.2	05/25/07 14:39	msh
Uranium (MWMT)	M6020 ICP-MS	0.0404		*	mg/L	0.0001	0.0005	05/25/07 0:12	jjr
Zinc (MWMT)	M6010B ICP	17.70		*	mg/L	0.01	0.05	05/25/07 14:39	msh

Soil Preparation

Parameter	EPA Method	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Meteoric Water	NDEP - MWMT, Sept. 19, 1990								
Mobility Extraction									
Dry Weight		5040			g			05/21/07 0:00	srs/brg
Extraction pH		6.24			units			05/21/07 0:00	srs/brg
Extraction Time		31			hrs			05/21/07 0:00	srs/brg
Leachate pH		3.84			units			05/21/07 0:00	srs/brg
Leachate Volume		4830			mL			05/21/07 0:00	srs/brg
Particle Size over 5 cm		46			%			05/21/07 0:00	srs/brg
Retained Moisture		21.1			%			05/21/07 0:00	srs/brg

Lisbon Valley Mining Company, LLC

Project ID:

Sample ID: SENT W 6320 BED14(C)

ACZ Sample ID: **L62424-03**

Date Sampled: 01/01/07 00:00

Date Received: 05/04/07

Sample Matrix: Soil

Metals Analysis

Parameter	EPA Method	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Antimony (MWMt)	M6020 ICP-MS		U	*	mg/L	0.0004	0.002	05/25/07 0:20	jjr
Arsenic (MWMt)	M6010B ICP		U	*	mg/L	0.04	0.2	05/25/07 14:42	msh
Cadmium (MWMt)	M6010B ICP		U	*	mg/L	0.005	0.02	05/25/07 14:42	msh
Copper (MWMt)	M6010B ICP		U	*	mg/L	0.01	0.05	05/25/07 14:42	msh
Molybdenum (MWMt)	M6010B ICP		U	*	mg/L	0.01	0.05	05/30/07 7:46	djt
Selenium (MWMt)	M6010B ICP		U	*	mg/L	0.04	0.2	05/25/07 14:42	msh
Uranium (MWMt)	M6020 ICP-MS	0.0038		*	mg/L	0.0001	0.0005	05/25/07 0:20	jjr
Zinc (MWMt)	M6010B ICP	0.02	B	*	mg/L	0.01	0.05	05/25/07 14:42	msh

Soil Preparation

Parameter	EPA Method	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Meteoric Water	NDEP - MWMt, Sept. 19, 1990								
Mobility Extraction									
Dry Weight		5100			g			05/21/07 0:00	srs/brg
Extraction pH		6.24			units			05/21/07 0:00	srs/brg
Extraction Time		29			hrs			05/21/07 0:00	srs/brg
Leachate pH		6.89			units			05/21/07 0:00	srs/brg
Leachate Volume		5110			mL			05/21/07 0:00	srs/brg
Particle Size over 5 cm		70			%			05/21/07 0:00	srs/brg
Retained Moisture		12.5			%			05/21/07 0:00	srs/brg

Lisbon Valley Mining Company, LLC

Project ID:

Sample ID: CENT 6380 BED6-8(D)

ACZ Sample ID: **L62424-04**

Date Sampled: 01/01/07 00:00

Date Received: 05/04/07

Sample Matrix: Soil

Metals Analysis

Parameter	EPA Method	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Antimony (MWMT)	M6020 ICP-MS	0.0023		*	mg/L	0.0004	0.002	05/29/07 17:43	jjr
Arsenic (MWMT)	M6010B ICP	0.05	B	*	mg/L	0.04	0.2	05/25/07 14:49	msh
Cadmium (MWMT)	M6010B ICP	1.550		*	mg/L	0.005	0.02	05/25/07 14:49	msh
Copper (MWMT)	M6010B ICP	0.25		*	mg/L	0.01	0.05	05/25/07 14:49	msh
Molybdenum (MWMT)	M6010B ICP		U	*	mg/L	0.01	0.05	05/30/07 8:02	djt
Selenium (MWMT)	M6010B ICP		U	*	mg/L	0.04	0.2	05/25/07 14:49	msh
Uranium (MWMT)	M6020 ICP-MS	0.0596		*	mg/L	0.0001	0.0005	05/25/07 0:37	jjr
Zinc (MWMT)	M6010B ICP	12.00		*	mg/L	0.01	0.05	05/25/07 14:49	msh

Soil Preparation

Parameter	EPA Method	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Meteoric Water	NDEP - MWMT, Sept. 19, 1990								
Mobility Extraction									
Dry Weight		5090			g			05/22/07 0:00	srs/brg
Extraction pH		6.24			units			05/22/07 0:00	srs/brg
Extraction Time		32			hrs			05/22/07 0:00	srs/brg
Leachate pH		3.25			units			05/22/07 0:00	srs/brg
Leachate Volume		4810			mL			05/22/07 0:00	srs/brg
Particle Size over 5 cm		55			%			05/22/07 0:00	srs/brg
Retained Moisture		14.7			%			05/22/07 0:00	srs/brg

Lisbon Valley Mining Company, LLC

Project ID:

Sample ID: CENT 6380 BED14(E)

ACZ Sample ID: **L62424-05**

Date Sampled: 01/01/07 00:00

Date Received: 05/04/07

Sample Matrix: Soil

Metals Analysis

Parameter	EPA Method	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Antimony (MWMT)	M6020 ICP-MS		U	*	mg/L	0.0004	0.002	05/25/07 0:41	jjr
Arsenic (MWMT)	M6010B ICP		U	*	mg/L	0.04	0.2	05/25/07 14:53	msh
Cadmium (MWMT)	M6010B ICP		U	*	mg/L	0.005	0.02	05/25/07 14:53	msh
Copper (MWMT)	M6010B ICP		U	*	mg/L	0.01	0.05	05/25/07 14:53	msh
Molybdenum (MWMT)	M6010B ICP		U	*	mg/L	0.01	0.05	05/30/07 8:07	djt
Selenium (MWMT)	M6010B ICP		U	*	mg/L	0.04	0.2	05/25/07 14:53	msh
Uranium (MWMT)	M6020 ICP-MS	0.0007		*	mg/L	0.0001	0.0005	05/25/07 0:41	jjr
Zinc (MWMT)	M6010B ICP	0.01	B	*	mg/L	0.01	0.05	05/25/07 14:53	msh

Soil Preparation

Parameter	EPA Method	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Meteoric Water	NDEP - MWMT, Sept. 19, 1990								
Mobility Extraction									
Dry Weight		5120			g			05/22/07 0:00	srs/brg
Extraction pH		6.24			units			05/22/07 0:00	srs/brg
Extraction Time		31			hrs			05/22/07 0:00	srs/brg
Leachate pH		6.97			units			05/22/07 0:00	srs/brg
Leachate Volume		4990			mL			05/22/07 0:00	srs/brg
Particle Size over 5 cm		83			%			05/22/07 0:00	srs/brg
Retained Moisture		3.5			%			05/22/07 0:00	srs/brg

Lisbon Valley Mining Company, LLC

Project ID:

Sample ID: CENT 6400 BED3-5(F)

ACZ Sample ID: **L62424-06**

Date Sampled: 01/01/07 00:00

Date Received: 05/04/07

Sample Matrix: Soil

Metals Analysis

Parameter	EPA Method	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Antimony (MWMT)	M6020 ICP-MS		U	*	mg/L	0.0004	0.002	05/25/07 0:45	jjr
Arsenic (MWMT)	M6010B ICP		U	*	mg/L	0.04	0.2	05/25/07 15:13	msh
Cadmium (MWMT)	M6010B ICP	0.712		*	mg/L	0.005	0.02	05/25/07 15:13	msh
Copper (MWMT)	M6010B ICP	19.20		*	mg/L	0.01	0.05	05/25/07 15:13	msh
Molybdenum (MWMT)	M6010B ICP		U	*	mg/L	0.01	0.05	05/30/07 8:11	djt
Selenium (MWMT)	M6010B ICP		U	*	mg/L	0.04	0.2	05/25/07 15:13	msh
Uranium (MWMT)	M6020 ICP-MS		U	*	mg/L	0.0001	0.0005	05/25/07 0:45	jjr
Zinc (MWMT)	M6010B ICP	2.27		*	mg/L	0.01	0.05	05/25/07 15:13	msh

Soil Preparation

Parameter	EPA Method	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Meteoritic Water	NDEP - MWMT, Sept. 19, 1990								
Mobility Extraction									
Dry Weight		5140			g			05/22/07 0:00	srs/brg
Extraction pH		6.24			units			05/22/07 0:00	srs/brg
Extraction Time		41.6			hrs			05/22/07 0:00	srs/brg
Leachate pH		5.6			units			05/22/07 0:00	srs/brg
Leachate Volume		6120			mL			05/22/07 0:00	srs/brg
Particle Size over 5 cm		67			%			05/22/07 0:00	srs/brg
Retained Moisture		11.9			%			05/22/07 0:00	srs/brg

Lisbon Valley Mining Company, LLC

Project ID:

Sample ID: CENT 6380 BED2(G)

ACZ Sample ID: **L62424-07**

Date Sampled: 01/01/07 00:00

Date Received: 05/04/07

Sample Matrix: Soil

Metals Analysis

Parameter	EPA Method	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Antimony (MWMT)	M6020 ICP-MS	0.0037		*	mg/L	0.0004	0.002	05/29/07 17:55	jir
Arsenic (MWMT)	M6010B ICP		U	*	mg/L	0.04	0.2	05/25/07 15:16	msh
Cadmium (MWMT)	M6010B ICP		U	*	mg/L	0.005	0.02	05/25/07 15:16	msh
Copper (MWMT)	M6010B ICP		U	*	mg/L	0.01	0.05	05/25/07 15:16	msh
Molybdenum (MWMT)	M6010B ICP	0.01	B	*	mg/L	0.01	0.05	05/30/07 8:15	djt
Selenium (MWMT)	M6010B ICP	0.06	B	*	mg/L	0.04	0.2	05/25/07 15:16	msh
Uranium (MWMT)	M6020 ICP-MS	0.0065		*	mg/L	0.0001	0.0005	05/25/07 0:49	jir
Zinc (MWMT)	M6010B ICP		U	*	mg/L	0.01	0.05	05/25/07 15:16	msh

Soil Preparation

Parameter	EPA Method	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Meteoric Water	NDEP - MWMT, Sept. 19, 1990								
Mobility Extraction									
Dry Weight		5130			g			05/23/07 0:00	srs/brg
Extraction pH		6.24			units			05/23/07 0:00	srs/brg
Extraction Time		32			hrs			05/23/07 0:00	srs/brg
Leachate pH		6.5			units			05/23/07 0:00	srs/brg
Leachate Volume		4960			mL			05/23/07 0:00	srs/brg
Particle Size over 5 cm		44			%			05/23/07 0:00	srs/brg
Retained Moisture		10.7			%			05/23/07 0:00	srs/brg

Lisbon Valley Mining Company, LLC

Project ID:

Sample ID: SENT W 6320 BED3-5(H)

ACZ Sample ID: **L62424-08**

Date Sampled: 02/01/07 00:00

Date Received: 05/04/07

Sample Matrix: Soil

Metals Analysis

Parameter	EPA Method	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Antimony (MWMT)	M6020 ICP-MS		U	*	mg/L	0.0004	0.002	05/25/07 0:54	jir
Arsenic (MWMT)	M6010B ICP		U	*	mg/L	0.04	0.2	05/25/07 15:20	msh
Cadmium (MWMT)	M6010B ICP		U	*	mg/L	0.005	0.02	05/25/07 15:20	msh
Copper (MWMT)	M6010B ICP	0.06		*	mg/L	0.01	0.05	05/25/07 15:20	msh
Molybdenum (MWMT)	M6010B ICP		U	*	mg/L	0.01	0.05	05/30/07 8:19	djt
Selenium (MWMT)	M6010B ICP		U	*	mg/L	0.04	0.2	05/25/07 15:20	msh
Uranium (MWMT)	M6020 ICP-MS	0.0010		*	mg/L	0.0001	0.0005	05/25/07 0:54	jir
Zinc (MWMT)	M6010B ICP	0.11		*	mg/L	0.01	0.05	05/25/07 15:20	msh

Soil Preparation

Parameter	EPA Method	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Meteoritic Water	NDEP - MWMT, Sept. 19, 1990								
Mobility Extraction									
Dry Weight		2940			g			05/23/07 0:00	srs/brg
Extraction pH		6.24			units			05/23/07 0:00	srs/brg
Extraction Time		25.5			hrs			05/23/07 0:00	srs/brg
Leachate pH		5.65			units			05/23/07 0:00	srs/brg
Leachate Volume		3000			mL			05/23/07 0:00	srs/brg
Particle Size over 5 cm		86			%			05/23/07 0:00	srs/brg
Retained Moisture		10.5			%			05/23/07 0:00	srs/brg

Lisbon Valley Mining Company, LLC

Project ID:

Sample ID: CENT 6380 BED11-13(I)

ACZ Sample ID: **L62424-09**

Date Sampled: 01/01/07 00:00

Date Received: 05/04/07

Sample Matrix: Soil

Metals Analysis

Parameter	EPA Method	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Antimony (MWMT)	M6020 ICP-MS		U	*	mg/L	0.0004	0.002	05/25/07 0:58	jir
Arsenic (MWMT)	M6010B ICP		U	*	mg/L	0.04	0.2	05/25/07 15:23	msh
Cadmium (MWMT)	M6010B ICP		U	*	mg/L	0.005	0.02	05/25/07 15:23	msh
Copper (MWMT)	M6010B ICP	0.02	B	*	mg/L	0.01	0.05	05/25/07 15:23	msh
Molybdenum (MWMT)	M6010B ICP		U	*	mg/L	0.01	0.05	05/30/07 8:23	djt
Selenium (MWMT)	M6010B ICP		U	*	mg/L	0.04	0.2	05/25/07 15:23	msh
Uranium (MWMT)	M6020 ICP-MS	0.0004	B	*	mg/L	0.0001	0.0005	05/25/07 0:58	jir
Zinc (MWMT)	M6010B ICP		U	*	mg/L	0.01	0.05	05/25/07 15:23	msh

Soil Preparation

Parameter	EPA Method	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Meteoric Water	NDEP - MWMT, Sept. 19, 1990								
Mobility Extraction									
Dry Weight		5060			g			05/23/07 0:00	srs/brg
Extraction pH		6.24			units			05/23/07 0:00	srs/brg
Extraction Time		31			hrs			05/23/07 0:00	srs/brg
Leachate pH		6.58			units			05/23/07 0:00	srs/brg
Leachate Volume		5020			mL			05/23/07 0:00	srs/brg
Particle Size over 5 cm		79			%			05/23/07 0:00	srs/brg
Retained Moisture		11.5			%			05/23/07 0:00	srs/brg

Report Header Explanations

<i>Batch</i>	A distinct set of samples analyzed at a specific time
<i>Found</i>	Value of the QC Type of interest
<i>Limit</i>	Upper limit for RPD, in %.
<i>Lower</i>	Lower Recovery Limit, in % (except for LCSS, mg/Kg)
<i>MDL</i>	Method Detection Limit. Same as Minimum Reporting Limit. Allows for instrument and annual fluctuations.
<i>PCN/SCN</i>	A number assigned to reagents/standards to trace to the manufacturer's certificate of analysis
<i>PQL</i>	Practical Quantitation Limit, typically 5 times the MDL.
<i>QC</i>	True Value of the Control Sample or the amount added to the Spike
<i>Rec</i>	Amount of the true value or spike added recovered, in % (except for LCSS, mg/Kg)
<i>RPD</i>	Relative Percent Difference, calculation used for Duplicate QC Types
<i>Upper</i>	Upper Recovery Limit, in % (except for LCSS, mg/Kg)
<i>Sample</i>	Value of the Sample of interest

QC Sample Types

<i>AS</i>	Analytical Spike (Post Digestion)	<i>LCSWD</i>	Laboratory Control Sample - Water Duplicate
<i>ASD</i>	Analytical Spike (Post Digestion) Duplicate	<i>LFB</i>	Laboratory Fortified Blank
<i>CCB</i>	Continuing Calibration Blank	<i>LFM</i>	Laboratory Fortified Matrix
<i>CCV</i>	Continuing Calibration Verification standard	<i>LFMD</i>	Laboratory Fortified Matrix Duplicate
<i>DUP</i>	Sample Duplicate	<i>LRB</i>	Laboratory Reagent Blank
<i>ICB</i>	Initial Calibration Blank	<i>MS</i>	Matrix Spike
<i>ICV</i>	Initial Calibration Verification standard	<i>MSD</i>	Matrix Spike Duplicate
<i>ICSAB</i>	Inter-element Correction Standard - A plus B solutions	<i>PBS</i>	Prep Blank - Soil
<i>LCSS</i>	Laboratory Control Sample - Soil	<i>PBW</i>	Prep Blank - Water
<i>LCSSD</i>	Laboratory Control Sample - Soil Duplicate	<i>PQV</i>	Practical Quantitation Verification standard
<i>LCSW</i>	Laboratory Control Sample - Water	<i>SDL</i>	Serial Dilution

QC Sample Type Explanations

Blanks	Verifies that there is no or minimal contamination in the prep method or calibration procedure.
Control Samples	Verifies the accuracy of the method, including the prep procedure.
Duplicates	Verifies the precision of the instrument and/or method.
Spikes/Fortified Matrix	Determines sample matrix interferences, if any.
Standard	Verifies the validity of the calibration.

ACZ Qualifiers (Qual)

B	Analyte concentration detected at a value between MDL and PQL.
H	Analysis exceeded method hold time. pH is a field test with an immediate hold time.
U	Analyte was analyzed for but not detected at the indicated MDL

Method References

- (1) EPA 600/4-83-020. Methods for Chemical Analysis of Water and Wastes, March 1983.
- (2) EPA 600/R-93-100. Methods for the Determination of Inorganic Substances in Environmental Samples, August 1993.
- (3) EPA 600/R-94-111. Methods for the Determination of Metals in Environmental Samples - Supplement I, May 1994.
- (5) EPA SW-846. Test Methods for Evaluating Solid Waste, Third Edition with Update III, December 1996.
- (6) Standard Methods for the Examination of Water and Wastewater, 19th edition, 1995.

Comments

- (1) QC results calculated from raw data. Results may vary slightly if the rounded values are used in the calculations.
- (2) Soil, Sludge, and Plant matrices for Inorganic analyses are reported on a dry weight basis.
- (3) Animal matrices for Inorganic analyses are reported on an "as received" basis.

Lisbon Valley Mining Company, LLC

ACZ Project ID: **L62424**

Project ID:

Antimony (MWMT)**M6020 ICP-MS**

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec	Lower	Upper	RPD	Limit	Qual
WG225321													
WG225321ICV	ICV	05/24/07 23:34	MS070518-1	.02		.02184	mg/L	109.2	90	110			
WG225321ICB	ICB	05/24/07 23:38				.00093	mg/L		-0.0012	0.0012			
WG224448PBS	PBS	05/24/07 23:55				U	mg/L		-0.0012	0.0012			
L62424-01AS	AS	05/25/07 0:03	MS070425-3	.00625	U	.00606	mg/L	97	75	125			
L62424-01ASD	ASD	05/25/07 0:07	MS070425-3	.00625	U	.00626	mg/L	100.2	75	125	3.25	20	
L62424-03DUP	DUP	05/25/07 0:33			U	U	mg/L				0	20	RA

WG225538

WG225538ICV	ICV	05/29/07 17:10	MS070518-1	.02		.02134	mg/L	106.7	90	110			
WG225538ICB	ICB	05/29/07 17:14				U	mg/L		-0.0012	0.0012			
WG224448PBS	PBS	05/29/07 17:30				U	mg/L		-0.0012	0.0012			
L62424-03DUP	DUP	05/29/07 17:39			U	U	mg/L				0	20	RA
L62424-04AS	AS	05/29/07 17:47	MS070425-3	.00625	.0023	.00858	mg/L	100.5	75	125			
L62424-04ASD	ASD	05/29/07 17:51	MS070425-3	.00625	.0023	.00903	mg/L	107.7	75	125	5.11	20	

Arsenic (MWMT)**M6010B ICP**

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec	Lower	Upper	RPD	Limit	Qual
WG225335													
WG225335ICV	ICV	05/25/07 14:15	II070518-6	4		4.045	mg/L	101.1	90	110			
WG225335ICB	ICB	05/25/07 14:19				U	mg/L		-0.12	0.12			
WG224448PBS	PBS	05/25/07 14:32				U	mg/L		-0.12	0.12			
L62424-03DUP	DUP	05/25/07 14:46			U	U	mg/L				0	20	RA
L62424-05AS	AS	05/25/07 15:06	II070516-3	1	U	1.094	mg/L	109.4	75	125			
L62424-05ASD	ASD	05/25/07 15:09	II070516-3	1	U	1.041	mg/L	104.1	75	125	4.96	20	

Cadmium (MWMT)**M6010B ICP**

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec	Lower	Upper	RPD	Limit	Qual
WG225335													
WG225335ICV	ICV	05/25/07 14:15	II070518-6	2		1.9284	mg/L	96.4	90	110			
WG225335ICB	ICB	05/25/07 14:19				U	mg/L		-0.015	0.015			
WG224448PBS	PBS	05/25/07 14:32				U	mg/L		-0.015	0.015			
L62424-03DUP	DUP	05/25/07 14:46			U	U	mg/L				0	20	RA
L62424-05AS	AS	05/25/07 15:06	II070516-3	.5	U	.5265	mg/L	105.3	75	125			
L62424-05ASD	ASD	05/25/07 15:09	II070516-3	.5	U	.5096	mg/L	101.9	75	125	3.26	20	

Copper (MWMT)**M6010B ICP**

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec	Lower	Upper	RPD	Limit	Qual
WG225335													
WG225335ICV	ICV	05/25/07 14:15	II070518-6	2		2.021	mg/L	101.1	90	110			
WG225335ICB	ICB	05/25/07 14:19				U	mg/L		-0.03	0.03			
WG224448PBS	PBS	05/25/07 14:32				U	mg/L		-0.03	0.03			
L62424-03DUP	DUP	05/25/07 14:46			U	U	mg/L				0	20	RA
L62424-05AS	AS	05/25/07 15:06	II070516-3	.5	U	.545	mg/L	109	75	125			
L62424-05ASD	ASD	05/25/07 15:09	II070516-3	.5	U	.53	mg/L	106	75	125	2.79	20	

Lisbon Valley Mining Company, LLC

ACZ Project ID: L62424

Project ID:

Molybdenum (MWMT)					M6010B ICP								
ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec	Lower	Upper	RPD	Limit	Qual
WG225505													
WG225505ICV	ICV	05/30/07 6:59	II070518-6	2		2.032	mg/L	101.6	90	110			
WG225505ICB	ICB	05/30/07 7:04				U	mg/L		-0.03	0.03			
WG224448PBS	PBS	05/30/07 7:20				U	mg/L		-0.03	0.03			
L62424-01AS	AS	05/30/07 7:33	II070516-3	.5	U	.419	mg/L	83.8	75	125			
L62424-01ASD	ASD	05/30/07 7:37	II070516-3	.5	U	.409	mg/L	81.8	75	125	2.42	20	
L62424-03DUP	DUP	05/30/07 7:58			U	U	mg/L				0	20	RA
Selenium (MWMT)					M6010B ICP								
ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec	Lower	Upper	RPD	Limit	Qual
WG225335													
WG225335ICV	ICV	05/25/07 14:15	II070518-6	4		4.013	mg/L	100.3	90	110			
WG225335ICB	ICB	05/25/07 14:19				U	mg/L		-0.12	0.12			
WG224448PBS	PBS	05/25/07 14:32				U	mg/L		-0.12	0.12			
L62424-03DUP	DUP	05/25/07 14:46			U	U	mg/L				0	20	RA
L62424-05AS	AS	05/25/07 15:06	II070516-3	1	U	.992	mg/L	99.2	75	125			
L62424-05ASD	ASD	05/25/07 15:09	II070516-3	1	U	1.014	mg/L	101.4	75	125	2.19	20	
Uranium (MWMT)					M6020 ICP-MS								
ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec	Lower	Upper	RPD	Limit	Qual
WG225321													
WG225321ICV	ICV	05/24/07 23:34	MS070518-1	.05		.04968	mg/L	99.4	90	110			
WG225321ICB	ICB	05/24/07 23:38				U	mg/L		-0.0003	0.0003			
WG224448PBS	PBS	05/24/07 23:55				U	mg/L		-0.0003	0.0003			
L62424-01AS	AS	05/25/07 0:03	MS070425-3	.025	.305	.3283	mg/L	93.2	75	125			
L62424-01ASD	ASD	05/25/07 0:07	MS070425-3	.025	.305	.3315	mg/L	106	75	125	0.97	20	
L62424-03DUP	DUP	05/25/07 0:33			.0038	.00259	mg/L				37.9	20	RC
WG225538													
WG225538ICV	ICV	05/29/07 17:10	MS070518-1	.05		.05084	mg/L	101.7	90	110			
WG225538ICB	ICB	05/29/07 17:14				U	mg/L		-0.0003	0.0003			
WG224448PBS	PBS	05/29/07 17:30				U	mg/L		-0.0003	0.0003			
L62424-03DUP	DUP	05/29/07 17:39			.0041	.00283	mg/L				36.7	20	RC
L62424-04AS	AS	05/29/07 17:47	MS070425-3	.025	.0633	.09275	mg/L	117.8	75	125			
L62424-04ASD	ASD	05/29/07 17:51	MS070425-3	.025	.0633	.09498	mg/L	126.7	75	125	2.38	20	MA
Zinc (MWMT)					M6010B ICP								
ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec	Lower	Upper	RPD	Limit	Qual
WG225335													
WG225335ICV	ICV	05/25/07 14:15	II070518-6	2		1.948	mg/L	97.4	90	110			
WG225335ICB	ICB	05/25/07 14:19				U	mg/L		-0.03	0.03			
WG224448PBS	PBS	05/25/07 14:32				U	mg/L		-0.03	0.03			
L62424-03DUP	DUP	05/25/07 14:46			.02	.011	mg/L				58.1	20	RA
L62424-05AS	AS	05/25/07 15:06	II070516-3	.5	.01	.53	mg/L	104	75	125			
L62424-05ASD	ASD	05/25/07 15:09	II070516-3	.5	.01	.51	mg/L	100	75	125	3.85	20	

Lisbon Valley Mining Company, LLC

ACZ Project ID: **L62424**

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L62424-01	WG225321	Antimony (MWMVT)	M6020 ICP-MS	N1	See Case Narrative.
			M6020 ICP-MS	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
	WG225335	Arsenic (MWMVT)	M6010B ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
		Cadmium (MWMVT)	M6010B ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
		Copper (MWMVT)	M6010B ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
	WG225505	Molybdenum (MWMVT)	M6010B ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
	WG225335	Selenium (MWMVT)	M6010B ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
	WG225538	Uranium (MWMVT)	M6020 ICP-MS	MA	Recovery for either the spike or spike duplicate was outside of the acceptance limits; the RPD was within the acceptance limits.
			M6020 ICP-MS	RC	For a solid matrix, the matrix duplicate precision assessment (RPD or RER) exceeded the control limit, which is attributable to the non-homogeneity of the sample.
	WG225335	Zinc (MWMVT)	M6010B ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
L62424-02	WG225321	Antimony (MWMVT)	M6020 ICP-MS	N1	See Case Narrative.
			M6020 ICP-MS	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
	WG225335	Arsenic (MWMVT)	M6010B ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
		Cadmium (MWMVT)	M6010B ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
		Copper (MWMVT)	M6010B ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
	WG225505	Molybdenum (MWMVT)	M6010B ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
	WG225335	Selenium (MWMVT)	M6010B ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
	WG225321	Uranium (MWMVT)	M6020 ICP-MS	RC	For a solid matrix, the matrix duplicate precision assessment (RPD or RER) exceeded the control limit, which is attributable to the non-homogeneity of the sample.
	WG225335	Zinc (MWMVT)	M6010B ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).

Lisbon Valley Mining Company, LLC

ACZ Project ID: **L62424**

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L62424-03	WG225321	Antimony (MWMVT)	M6020 ICP-MS	N1	See Case Narrative.
			M6020 ICP-MS	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
	WG225335	Arsenic (MWMVT)	M6010B ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
		Cadmium (MWMVT)	M6010B ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
		Copper (MWMVT)	M6010B ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
	WG225505	Molybdenum (MWMVT)	M6010B ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
	WG225335	Selenium (MWMVT)	M6010B ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
	WG225321	Uranium (MWMVT)	M6020 ICP-MS	RC	For a solid matrix, the matrix duplicate precision assessment (RPD or RER) exceeded the control limit, which is attributable to the non-homogeneity of the sample.
L62424-04	WG225335	Zinc (MWMVT)	M6010B ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
	WG225338	Antimony (MWMVT)	M6020 ICP-MS	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
	WG225335	Arsenic (MWMVT)	M6010B ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
		Cadmium (MWMVT)	M6010B ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
		Copper (MWMVT)	M6010B ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
	WG225505	Molybdenum (MWMVT)	M6010B ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
	WG225335	Selenium (MWMVT)	M6010B ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
	WG225321	Uranium (MWMVT)	M6020 ICP-MS	RC	For a solid matrix, the matrix duplicate precision assessment (RPD or RER) exceeded the control limit, which is attributable to the non-homogeneity of the sample.
	WG225335	Zinc (MWMVT)	M6010B ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).

Lisbon Valley Mining Company, LLC

ACZ Project ID: **L62424**

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L62424-05	WG225321	Antimony (MWMPT)	M6020 ICP-MS	N1	See Case Narrative.
			M6020 ICP-MS	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
	WG225335	Arsenic (MWMPT)	M6010B ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
		Cadmium (MWMPT)	M6010B ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
		Copper (MWMPT)	M6010B ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
	WG225505	Molybdenum (MWMPT)	M6010B ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
	WG225335	Selenium (MWMPT)	M6010B ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
	WG225321	Uranium (MWMPT)	M6020 ICP-MS	RC	For a solid matrix, the matrix duplicate precision assessment (RPD or RER) exceeded the control limit, which is attributable to the non-homogeneity of the sample.
	WG225335	Zinc (MWMPT)	M6010B ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
L62424-06	WG225321	Antimony (MWMPT)	M6020 ICP-MS	N1	See Case Narrative.
			M6020 ICP-MS	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
	WG225335	Arsenic (MWMPT)	M6010B ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
		Cadmium (MWMPT)	M6010B ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
		Copper (MWMPT)	M6010B ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
	WG225505	Molybdenum (MWMPT)	M6010B ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
	WG225335	Selenium (MWMPT)	M6010B ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
	WG225321	Uranium (MWMPT)	M6020 ICP-MS	RC	For a solid matrix, the matrix duplicate precision assessment (RPD or RER) exceeded the control limit, which is attributable to the non-homogeneity of the sample.
	WG225335	Zinc (MWMPT)	M6010B ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).

Lisbon Valley Mining Company, LLC

ACZ Project ID: **L62424**

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L62424-07	WG225538	Antimony (MWMt)	M6020 ICP-MS	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
	WG225335	Arsenic (MWMt)	M6010B ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
		Cadmium (MWMt)	M6010B ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
		Copper (MWMt)	M6010B ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
	WG225505	Molybdenum (MWMt)	M6010B ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
	WG225335	Selenium (MWMt)	M6010B ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
	WG225321	Uranium (MWMt)	M6020 ICP-MS	RC	For a solid matrix, the matrix duplicate precision assessment (RPD or RER) exceeded the control limit, which is attributable to the non-homogeneity of the sample.
	WG225335	Zinc (MWMt)	M6010B ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
L62424-08	WG225321	Antimony (MWMt)	M6020 ICP-MS	N1	See Case Narrative.
			M6020 ICP-MS	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
	WG225335	Arsenic (MWMt)	M6010B ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
		Cadmium (MWMt)	M6010B ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
		Copper (MWMt)	M6010B ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
	WG225505	Molybdenum (MWMt)	M6010B ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
	WG225335	Selenium (MWMt)	M6010B ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
	WG225321	Uranium (MWMt)	M6020 ICP-MS	RC	For a solid matrix, the matrix duplicate precision assessment (RPD or RER) exceeded the control limit, which is attributable to the non-homogeneity of the sample.
	WG225335	Zinc (MWMt)	M6010B ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).

Lisbon Valley Mining Company, LLC

ACZ Project ID: L62424

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L62424-09	WG225321	Antimony (MWMT)	M6020 ICP-MS	N1	See Case Narrative.
			M6020 ICP-MS	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
	WG225335	Arsenic (MWMT)	M6010B ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
		Cadmium (MWMT)	M6010B ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
		Copper (MWMT)	M6010B ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
	WG225505	Molybdenum (MWMT)	M6010B ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
	WG225335	Selenium (MWMT)	M6010B ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
	WG225321	Uranium (MWMT)	M6020 ICP-MS	RC	For a solid matrix, the matrix duplicate precision assessment (RPD or RER) exceeded the control limit, which is attributable to the non-homogeneity of the sample.
	WG225335	Zinc (MWMT)	M6010B ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).

Lisbon Valley Mining Company, LLC

ACZ Project ID: **L62424**

Metals Analysis

The following parameters are not offered for certification or are not covered by NELAC certificate #ACZ.

Uranium (MWM)

M6020 ICP-MS

Lisbon Valley Mining Company, LLC

ACZ Project ID: L62424

Date Received: 5/4/2007

Received By:

Date Printed: 5/8/2007

Receipt Verification

	YES	NO	NA
1) Does this project require special handling procedures such as CLP protocol?			X
2) Are the custody seals on the cooler intact?			X
3) Are the custody seals on the sample containers intact?			X
4) Is there a Chain of Custody or other directive shipping papers present?	X		
5) Is the Chain of Custody complete?	X		
6) Is the Chain of Custody in agreement with the samples received?	X		
7) Is there enough sample for all requested analyses?	X		
8) Are all samples within holding times for requested analyses?	X		
9) Were all sample containers received intact?	X		
10) Are the temperature blanks present?			X
11) Are the trip blanks (VOA and/or Cyanide) present?			X
12) Are samples requiring no headspace, headspace free?			X
13) Do the samples that require a Foreign Soils Permit have one?			X

Exceptions: If you answered no to any of the above questions, please describe

N/A

Contact (For any discrepancies, the client must be contacted)

N/A

Shipping Containers










Cooler Id		Temp (°C)	Rad (µR/hr)
1559		16	16
1660		18.5	15

Client must contact ACZ Project Manager if analysis should not proceed for samples received outside of thermal preservation acceptance criteria.

Notes

Lisbon Valley Mining Company, LLC

ACZ Project ID: L62424
Date Received: 5/4/2007
Received By:**Sample Container Preservation**

SAMPLE	CLIENT ID	R < 2	G < 2	BK < 2	Y < 2	YG < 2	B < 2	O < 2	T > 12	N/A	RAD	ID
L62424-01	SENT W 6320BED6-8(A)									X		
L62424-02	CENT 6380 BED9-10(B)									X		
L62424-03	SENT W 6320 BED14(C)									X		
L62424-04	CENT 6380 BED6-8(D)									X		
L62424-05	CENT 6380 BED14(E)									X		
L62424-06	CENT 6400 BED3-5(F)									X		
L62424-07	CENT 6380 BED2(G)									X		
L62424-08	SENT W 6320 BED3-5(H)									X		
L62424-09	CENT 6380 BED11-13(I)									X		

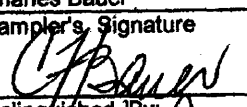
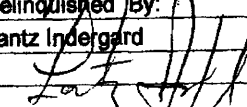

Sample Container Preservation Legend

Abbreviation	Description	Container Type	Preservative/Limits
R	Raw/Nitric	RED	pH must be < 2
B	Filtered/Sulfuric	BLUE	pH must be < 2
BK	Filtered/Nitric	BLACK	pH must be < 2
G	Filtered/Nitric	GREEN	pH must be < 2
O	Raw/Sulfuric	ORANGE	pH must be < 2
P	Raw/NaOH	PURPLE	pH must be > 12 *
T	Raw/NaOH Zinc Acetate	TAN	pH must be > 12
Y	Raw/Sulfuric	YELLOW	pH must be < 2
YG	Raw/Sulfuric	YELLOW GLASS	pH must be < 2
N/A	No preservative needed	Not applicable	
RAD	Gamma/Beta dose rate	Not applicable	must be < 250 µR/hr

* pH check performed by analyst prior to sample preparation

Sample IDs Reviewed By: _____

L62424

Lisbon Valley Mining Co.				Chain of Custody Record			
P.O. Box 248 920 S. County Rd. 313 La Sal, Utah 84530 Phone: (435) 686-9950				Send report with laboratory QA to: 920 S County Rd 313 La Sal, Utah 84530			
Lisbon Valley Copper Project			ANALYSES			Number of Containers	ACZ Laboratories, Inc. 2773 Downhill Drive Steamboat Springs, CO (970) 879-6590
SAMPLE NUMBER	DATE	TIME	MWMP				
9. Cent 6380 Bed 11-13 (I)	Jan 07		x				1 Composite samples per suffix (ie. A-J)
1. Sent W 6320 Bed 6-8 (A)	Jan 07		x				1 As Above
2. Cent 6380 Bed 9-10 (B)	Jan 07		x				1 As Above
3. Sent W 6320 Bed 14 (C)	Jan 07		x				1 As Above
4. Cent 6380 Bed 6-8 (D)	Jan 07		x				1 As Above
5. Cent 6380 Bed 14 (E)	Jan 07		x				1 As Above
6. Cent 6400 Bed 3-5 (F)	Jan 07		x				1 As Above
7. Cent 6380 Bed 2 (G)	Jan 07		x				1 As Above
3. Sent W 6320 Bed 14 (C)	Feb 07		x				1 As Above
Cent 6380 Bed 2 (G)	Feb 07		x				1 As Above
2. Cent 6380 Bed 9-10 (B)	Feb 07		x				1 As Above
7. Cent 6360 Bed 2 (G)	Mar 07		x				1 As Above
8. Sent W 6320 Bed 3-5 (H)	Feb 07		x				1 As Above
1. Sent W 6320 Bed 6-8 (A)	Feb 07		x				1 As Above
6. Cent 6380 Bed 3-5 (F)	Feb 07		x				1 As Above
4. Cent 6360 Bed 6-8 (D)	Mar 07		x				1 As Above
Sampled By: Charles Bauer			Total Number of Containers			16	
Sampler's Signature 			Contact Person: Lantz M Indergard Phone: (435) 686-9950 ext. 226 Fax: (435) 686-2223				
Relinquished By: Lantz Indergard 			Date / Time: 5-1-07 12:24		Received By:  Date / Time: 5-4-07 10:57		
Method of Shipment: UPS			Comments: These samples are to be composited to represent 4th Qtr 2006 The letter suffix identifies one analysis of up to 3 samples				

Lisbon Valley Mining Co.				Chain of Custody Record				
P.O. Box 248 920 S. County Rd. 313 La Sal, Utah 84530 Phone: (435) 686-9950				Send report with laboratory QA to: 920 S County Rd 313 La Sal, Utah 84530				
Lisbon Valley Copper Project			ANALYSES					
SAMPLE NUMBER	DATE	TIME	MWMP				Number of Containers	
							ACZ Laboratories, Inc. 2773 Downhill Drive Steamboat Springs, CO (970) 879-6590 <u>Remarks / Comments</u> Composite samples per suffix (ie. A-J)	
9. Cent 6380 Bed 11-13 (I)	Feb 07		x					1
5. Cent 6380 Bed 14 (E)	Feb 07		x					1
6. Cent 6380 Bed 3-5 (F)	Mar 07		x					1
4. Cent 6380 Bed 6-8 (D)	Feb 07		x					1
3. Sent West 6300 Bed 14 @	Mar 07		x					1
2. Cent 6360 Bed 9-10 (B)	Mar 07		x					1
Sampled By: Charles Bauer			Total Number of Containers 6					
Sampler's Signature <i>CBauer</i>			Contact Person: Lantz M Indergard Phone: (435) 686-9950 ext. 226 Fax: (435) 686-2223					
Relinquished By: Lantz Indergard			Received By:					
Date / Time: <i>5-1-07 12:24</i>			Date / Time:					
Method of Shipment: UPS			Comments: These samples are to be composited to represent 4th Qtr 2006 The letter suffix identifies one analysis of up to 3 samples					

September 04, 2007

Report to:

Lantz Indergard
Lisbon Valley Mining Company, LLC
P.O. Box 248
La Sal, UT 84530

Bill to:

Lantz Indergard
Lisbon Valley Mining Company, LLC
P.O. Box 248
La Sal, UT 84530

Project ID:

ACZ Project ID: L64270

Lantz Indergard:

Enclosed are the analytical results for sample(s) submitted to ACZ Laboratories, Inc. (ACZ) on August 06, 2007. This project has been assigned to ACZ's project number, L64270. Please reference this number in all future inquiries.

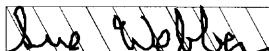
All analyses were performed according to ACZ's Quality Assurance Plan, version 12.0. The enclosed results relate only to the samples received under L64270. Each section of this report has been reviewed and approved by the appropriate Laboratory Supervisor, or a qualified substitute.

Except as noted, the test results for the methods and parameters listed on ACZ's current NELAC certificate letter (#ACZ) meet all requirements of NELAC.

This report shall be used or copied only in its entirety. ACZ is not responsible for the consequences arising from the use of a partial report.

All samples and sub-samples associated with this project will be disposed of after October 04, 2007. If the samples are determined to be hazardous, additional charges apply for disposal (typically less than \$10/sample). If you would like the samples to be held longer than ACZ's stated policy or to be returned, please contact your Project Manager or Customer Service Representative for further details and associated costs. ACZ retains analytical reports for five years.

If you have any questions or other needs, please contact your Project Manager.



04/Sep/07

Sue Webber, Project Manager, has reviewed and approved this report in its entirety.



Lisbon Valley Mining Company, LLC

Project ID:

Sample ID: CENT6360BED6-8(A)

ACZ Sample ID: **L64270-01**

Date Sampled: 04/01/07 00:00

Date Received: 08/06/07

Sample Matrix: Soil

Metals Analysis

Parameter	EPA Method	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Antimony (MWMT)	M6020 ICP-MS	0.0027		*	mg/L	0.0004	0.002	08/28/07 13:33	msh/scp
Arsenic (MWMT)	M6010B ICP		U	*	mg/L	0.04	0.2	08/30/07 11:14	djt
Cadmium (MWMT)	M6010B ICP	5.000		*	mg/L	0.005	0.02	08/30/07 11:14	djt
Copper (MWMT)	M6010B ICP	99.40		*	mg/L	0.01	0.05	08/30/07 11:14	djt
Molybdenum (MWMT)	M6010B ICP		U	*	mg/L	0.05	0.3	08/31/07 15:54	djt
Selenium (MWMT)	M6010B ICP		U	*	mg/L	0.2	1	08/31/07 15:54	djt
Uranium (MWMT)	M6020 ICP-MS	0.0377		*	mg/L	0.0001	0.0005	08/25/07 9:30	scp
Zinc (MWMT)	M6010B ICP	15.70		*	mg/L	0.05	0.3	08/31/07 15:54	djt

Soil Preparation

Parameter	EPA Method	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Meteoric Water	NDEP - MWMT, Sept. 19, 1990								
Mobility Extraction									
Dry Weight		4990			g			08/22/07 0:00	srs
Extraction pH		5.5			units			08/22/07 0:00	srs
Extraction Time		29			hrs			08/22/07 0:00	srs
Leachate pH		4.09			units			08/22/07 0:00	srs
Leachate Volume		4980			mL			08/22/07 0:00	srs
Particle Size over 5 cm		64			%			08/22/07 0:00	srs
Retained Moisture		9.56			%			08/22/07 0:00	srs

Lisbon Valley Mining Company, LLC

Project ID:

Sample ID: CENT6360BED14(B)

ACZ Sample ID: **L64270-02**

Date Sampled: 04/01/07 00:00

Date Received: 08/06/07

Sample Matrix: Soil

Metals Analysis

Parameter	EPA Method	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Antimony (MWMt)	M6020 ICP-MS	0.0006	B	*	mg/L	0.0004	0.002	08/28/07 13:37	msh/scp
Arsenic (MWMt)	M6010B ICP		U	*	mg/L	0.04	0.2	08/30/07 11:28	djt
Cadmium (MWMt)	M6010B ICP		U	*	mg/L	0.005	0.02	08/30/07 11:28	djt
Copper (MWMt)	M6010B ICP	0.04	B	*	mg/L	0.01	0.05	08/30/07 11:28	djt
Molybdenum (MWMt)	M6010B ICP		U	*	mg/L	0.01	0.05	08/31/07 16:08	djt
Selenium (MWMt)	M6010B ICP		U	*	mg/L	0.04	0.2	08/31/07 16:08	djt
Uranium (MWMt)	M6020 ICP-MS	0.0047		*	mg/L	0.0001	0.0005	08/25/07 9:43	scp
Zinc (MWMt)	M6010B ICP	0.02	B	*	mg/L	0.01	0.05	08/31/07 16:08	djt

Soil Preparation

Parameter	EPA Method	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Meteoric Water	NDEP - MWMt, Sept. 19, 1990								
Mobility Extraction									
Dry Weight		4970			g			08/22/07 0:00	srs
Extraction pH		5.5			units			08/22/07 0:00	srs
Extraction Time		29			hrs			08/22/07 0:00	srs
Leachate pH		6.73			units			08/22/07 0:00	srs
Leachate Volume		5010			mL			08/22/07 0:00	srs
Particle Size over 5 cm		74			%			08/22/07 0:00	srs
Retained Moisture		15.5			%			08/22/07 0:00	srs

Lisbon Valley Mining Company, LLC

Project ID:

Sample ID: CENT6360BED3-5(C)

ACZ Sample ID: **L64270-03**

Date Sampled: 04/01/07 00:00

Date Received: 08/06/07

Sample Matrix: Soil

Metals Analysis

Parameter	EPA Method	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Antimony (MWMT)	M6020 ICP-MS		U		mg/L	0.0004	0.002	08/28/07 13:46	msh/scp
Arsenic (MWMT)	M6010B ICP		U	*	mg/L	0.04	0.2	08/30/07 11:42	djt
Cadmium (MWMT)	M6010B ICP	2.850		*	mg/L	0.005	0.02	08/30/07 11:42	djt
Copper (MWMT)	M6010B ICP	10.40		*	mg/L	0.01	0.05	08/30/07 11:42	djt
Molybdenum (MWMT)	M6010B ICP		U	*	mg/L	0.01	0.05	08/31/07 16:22	djt
Selenium (MWMT)	M6010B ICP		U	*	mg/L	0.04	0.2	08/31/07 16:22	djt
Uranium (MWMT)	M6020 ICP-MS	0.0002	B	*	mg/L	0.0001	0.0005	08/25/07 9:53	scp
Zinc (MWMT)	M6010B ICP	3.83		*	mg/L	0.01	0.05	08/31/07 16:22	djt

Soil Preparation

Parameter	EPA Method	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Meteoric Water	NDEP - MWMT, Sept. 19, 1990								
Mobility Extraction									
Dry Weight		4960			g			08/22/07 0:00	srs
Extraction pH		5.5			units			08/22/07 0:00	srs
Extraction Time		32.3			hrs			08/22/07 0:00	srs
Leachate pH		5.59			units			08/22/07 0:00	srs
Leachate Volume		4970			mL			08/22/07 0:00	srs
Particle Size over 5 cm		21			%			08/22/07 0:00	srs
Retained Moisture		18.8			%			08/22/07 0:00	srs

Lisbon Valley Mining Company, LLC

Project ID:

Sample ID: CENT6360BED2(D)

ACZ Sample ID: **L64270-04**

Date Sampled: 04/01/07 00:00

Date Received: 08/06/07

Sample Matrix: Soil

Metals Analysis

Parameter	EPA Method	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Antimony (MWMT)	M6020 ICP-MS	0.0014	B		mg/L	0.0004	0.002	08/28/07 13:51	msh/scp
Arsenic (MWMT)	M6010B ICP		U	*	mg/L	0.04	0.2	08/30/07 11:46	djt
Cadmium (MWMT)	M6010B ICP		U	*	mg/L	0.005	0.02	08/30/07 11:46	djt
Copper (MWMT)	M6010B ICP	0.04	B	*	mg/L	0.01	0.05	08/30/07 11:46	djt
Molybdenum (MWMT)	M6010B ICP	0.02	B	*	mg/L	0.01	0.05	08/31/07 16:25	djt
Selenium (MWMT)	M6010B ICP	0.05	B	*	mg/L	0.04	0.2	08/31/07 16:25	djt
Uranium (MWMT)	M6020 ICP-MS	0.0014		*	mg/L	0.0001	0.0005	08/25/07 10:02	scp
Zinc (MWMT)	M6010B ICP	0.02	B	*	mg/L	0.01	0.05	08/31/07 16:25	djt

Soil Preparation

Parameter	EPA Method	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Meteoritic Water	NDEP - MWMT, Sept. 19, 1990								
Mobility Extraction									
Dry Weight		4960			g			08/22/07 0:00	srs
Extraction pH		5.5			units			08/22/07 0:00	srs
Extraction Time		32.3			hrs			08/22/07 0:00	srs
Leachate pH		6.4			units			08/22/07 0:00	srs
Leachate Volume		4840			mL			08/22/07 0:00	srs
Particle Size over 5 cm		34			%			08/22/07 0:00	srs
Retained Moisture		14.2			%			08/22/07 0:00	srs

ACZ Laboratories, Inc.

2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

Inorganic Analytical Results

Lisbon Valley Mining Company, LLC

Project ID:

Sample ID: SENTWEST6300BED6-8(E)

ACZ Sample ID: **L64270-05**

Date Sampled: 04/01/07 00:00

Date Received: 08/06/07

Sample Matrix: Soil

Metals Analysis

Parameter	EPA Method	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Antimony (MWMT)	M6020 ICP-MS	0.0006	B	*	mg/L	0.0004	0.002	08/28/07 14:04	msh/scp
Arsenic (MWMT)	M6010B ICP		U	*	mg/L	0.04	0.2	08/30/07 11:49	djt
Cadmium (MWMT)	M6010B ICP	0.061		*	mg/L	0.005	0.02	08/30/07 11:49	djt
Copper (MWMT)	M6010B ICP	0.35		*	mg/L	0.01	0.05	08/30/07 11:49	djt
Molybdenum (MWMT)	M6010B ICP		U	*	mg/L	0.01	0.05	08/31/07 16:29	djt
Selenium (MWMT)	M6010B ICP		U	*	mg/L	0.04	0.2	08/31/07 16:29	djt
Uranium (MWMT)	M6020 ICP-MS	0.0319		*	mg/L	0.0001	0.0005	08/25/07 10:07	scp
Zinc (MWMT)	M6010B ICP	1.74		*	mg/L	0.01	0.05	08/31/07 16:29	djt

Soil Preparation

Parameter	EPA Method	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Meteoric Water Mobility Extraction	NDEP - MWMT, Sept. 19, 1990								
Dry Weight		2490			g			08/22/07 0:00	srs
Extraction pH		5.5			units			08/22/07 0:00	srs
Extraction Time		28			hrs			08/22/07 0:00	srs
Leachate pH		3.58			units			08/22/07 0:00	srs
Leachate Volume		2650			mL			08/22/07 0:00	srs
Particle Size over 5 cm		57			%			08/22/07 0:00	srs
Retained Moisture		14.1			%			08/22/07 0:00	srs

Lisbon Valley Mining Company, LLC

Project ID:

Sample ID: SENTWEST6300BED14(F)

ACZ Sample ID: **L64270-06**

Date Sampled: 04/01/07 00:00

Date Received: 08/06/07

Sample Matrix: Soil

Metals Analysis

Parameter	EPA Method	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Antimony (MWMT)	M6020 ICP-MS	0.0005	B	*	mg/L	0.0004	0.002	08/28/07 14:21	msh/scp
Arsenic (MWMT)	M6010B ICP		U	*	mg/L	0.04	0.2	08/30/07 11:53	djt
Cadmium (MWMT)	M6010B ICP		U	*	mg/L	0.005	0.02	08/30/07 11:53	djt
Copper (MWMT)	M6010B ICP		U	*	mg/L	0.01	0.05	08/30/07 11:53	djt
Molybdenum (MWMT)	M6010B ICP	0.01	B	*	mg/L	0.01	0.05	08/31/07 16:32	djt
Selenium (MWMT)	M6010B ICP		U	*	mg/L	0.04	0.2	08/31/07 16:32	djt
Uranium (MWMT)	M6020 ICP-MS	0.0155		*	mg/L	0.0001	0.0005	08/25/07 10:20	scp
Zinc (MWMT)	M6010B ICP	0.02	B	*	mg/L	0.01	0.05	08/31/07 16:32	djt

Soil Preparation

Parameter	EPA Method	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Meteoritic Water	NDEP - MWMT, Sept. 19, 1990								
Mobility Extraction									
Dry Weight		4980			g			08/22/07 0:00	srs
Extraction pH		5.5			units			08/22/07 0:00	srs
Extraction Time		31.8			hrs			08/22/07 0:00	srs
Leachate pH		6.74			units			08/22/07 0:00	srs
Leachate Volume		4900			mL			08/22/07 0:00	srs
Particle Size over 5 cm		72			%			08/22/07 0:00	srs
Retained Moisture		11.4			%			08/22/07 0:00	srs

Lisbon Valley Mining Company, LLC

Project ID:

Sample ID: CENT6360BED11-13(G)

ACZ Sample ID: **L64270-07**

Date Sampled: 04/01/07 00:00

Date Received: 08/06/07

Sample Matrix: Soil

Metals Analysis

Parameter	EPA Method	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Antimony (MWMT)	M6020 ICP-MS	0.0005	B	*	mg/L	0.0004	0.002	08/28/07 14:26	msh/scp
Arsenic (MWMT)	M6010B ICP		U	*	mg/L	0.04	0.2	08/30/07 11:56	djt
Cadmium (MWMT)	M6010B ICP	0.008	B	*	mg/L	0.005	0.02	08/30/07 11:56	djt
Copper (MWMT)	M6010B ICP	0.03	B	*	mg/L	0.01	0.05	08/30/07 11:56	djt
Molybdenum (MWMT)	M6010B ICP	0.09		*	mg/L	0.01	0.05	08/31/07 16:36	djt
Selenium (MWMT)	M6010B ICP		U	*	mg/L	0.04	0.2	08/31/07 16:36	djt
Uranium (MWMT)	M6020 ICP-MS	0.0047		*	mg/L	0.0001	0.0005	08/25/07 10:25	scp
Zinc (MWMT)	M6010B ICP	0.06		*	mg/L	0.01	0.05	08/31/07 16:36	djt

Soil Preparation

Parameter	EPA Method	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Meteoric Water	NDEP - MWMT, Sept. 19, 1990								
Mobility Extraction									
Dry Weight		4960			g			08/22/07 0:00	srs
Extraction pH		5.5			units			08/22/07 0:00	srs
Extraction Time		32.3			hrs			08/22/07 0:00	srs
Leachate pH		6.69			units			08/22/07 0:00	srs
Leachate Volume		4960			mL			08/22/07 0:00	srs
Particle Size over 5 cm		52			%			08/22/07 0:00	srs
Retained Moisture		15.3			%			08/22/07 0:00	srs

Lisbon Valley Mining Company, LLC

Project ID:

Sample ID: CENT6360BED9-10(H)

ACZ Sample ID: **L64270-08**

Date Sampled: 05/01/07 00:00

Date Received: 08/06/07

Sample Matrix: Soil

Metals Analysis

Parameter	EPA Method	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Antimony (MWMT)	M6020 ICP-MS		U	*	mg/L	0.0004	0.002	08/28/07 14:30	msh/scp
Arsenic (MWMT)	M6010B ICP		U	*	mg/L	0.04	0.2	08/30/07 12:00	djt
Cadmium (MWMT)	M6010B ICP	0.649		*	mg/L	0.005	0.02	08/30/07 12:00	djt
Copper (MWMT)	M6010B ICP	0.36		*	mg/L	0.01	0.05	08/30/07 12:00	djt
Molybdenum (MWMT)	M6010B ICP		U	*	mg/L	0.01	0.05	08/31/07 16:40	djt
Selenium (MWMT)	M6010B ICP		U	*	mg/L	0.04	0.2	08/31/07 16:40	djt
Uranium (MWMT)	M6020 ICP-MS		U	*	mg/L	0.0001	0.0005	08/25/07 10:30	scp
Zinc (MWMT)	M6010B ICP	0.95		*	mg/L	0.01	0.05	08/31/07 16:40	djt

Soil Preparation

Parameter	EPA Method	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Meteoritic Water	NDEP - MWMT, Sept. 19, 1990								
Mobility Extraction									
Dry Weight		4970			g			08/22/07 0:00	srs
Extraction pH		5.5			units			08/22/07 0:00	srs
Extraction Time		34.8			hrs			08/22/07 0:00	srs
Leachate pH		6.72			units			08/22/07 0:00	srs
Leachate Volume		4860			mL			08/22/07 0:00	srs
Particle Size over 5 cm		59			%			08/22/07 0:00	srs
Retained Moisture		20			%			08/22/07 0:00	srs

ACZ Laboratories, Inc.

2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

Inorganic Analytical Results

Lisbon Valley Mining Company, LLC

Project ID:

Sample ID: SENTW6260BED9-10(I)

ACZ Sample ID: **L64270-09**

Date Sampled: 06/01/07 00:00

Date Received: 08/06/07

Sample Matrix: Soil

Metals Analysis

Parameter	EPA Method	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Antimony (MWMT)	M6020 ICP-MS	0.0009	B	*	mg/L	0.0004	0.002	08/28/07 14:34	msh/scp
Arsenic (MWMT)	M6010B ICP		U	*	mg/L	0.04	0.2	08/30/07 12:03	djt
Cadmium (MWMT)	M6010B ICP		U	*	mg/L	0.005	0.02	08/30/07 12:03	djt
Copper (MWMT)	M6010B ICP		U	*	mg/L	0.01	0.05	08/30/07 12:03	djt
Molybdenum (MWMT)	M6010B ICP	0.07		*	mg/L	0.01	0.05	08/31/07 16:43	djt
Selenium (MWMT)	M6010B ICP		U	*	mg/L	0.04	0.2	08/31/07 16:43	djt
Uranium (MWMT)	M6020 ICP-MS	0.0051		*	mg/L	0.0001	0.0005	08/25/07 10:34	scp
Zinc (MWMT)	M6010B ICP	0.03	B	*	mg/L	0.01	0.05	08/31/07 16:43	djt

Soil Preparation

Parameter	EPA Method	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Meteoric Water	NDEP - MWMT, Sept. 19, 1990								
Mobility Extraction									
Dry Weight		4970			g			08/22/07 0:00	srs
Extraction pH		5.5			units			08/22/07 0:00	srs
Extraction Time		29			hrs			08/22/07 0:00	srs
Leachate pH		6.51			units			08/22/07 0:00	srs
Leachate Volume		5070			mL			08/22/07 0:00	srs
Particle Size over 5 cm		58			%			08/22/07 0:00	srs
Retained Moisture		13.3			%			08/22/07 0:00	srs

Lisbon Valley Mining Company, LLC

Project ID:

Sample ID: GTO6440BED2(J)

ACZ Sample ID: **L64270-10**

Date Sampled: 06/01/07 00:00

Date Received: 08/06/07

Sample Matrix: Soil

Metals Analysis

Parameter	EPA Method	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Antimony (MWMT)	M6020 ICP-MS		U	*	mg/L	0.0004	0.002	08/28/07 14:39	msh/scp
Arsenic (MWMT)	M6010B ICP		U	*	mg/L	0.04	0.2	08/30/07 12:07	djt
Cadmium (MWMT)	M6010B ICP		U	*	mg/L	0.005	0.02	08/30/07 12:07	djt
Copper (MWMT)	M6010B ICP		U	*	mg/L	0.01	0.05	08/30/07 12:07	djt
Molybdenum (MWMT)	M6010B ICP		U	*	mg/L	0.01	0.05	08/31/07 16:47	djt
Selenium (MWMT)	M6010B ICP	0.07	B	*	mg/L	0.04	0.2	08/31/07 16:47	djt
Uranium (MWMT)	M6020 ICP-MS	0.0037		*	mg/L	0.0001	0.0005	08/25/07 10:39	scp
Zinc (MWMT)	M6010B ICP	0.02	B	*	mg/L	0.01	0.05	08/31/07 16:47	djt

Soil Preparation

Parameter	EPA Method	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Meteoric Water	NDEP - MWMT, Sept. 19, 1990								
Mobility Extraction									
Dry Weight		2510			g			08/22/07 0:00	srs
Extraction pH		5.5			units			08/22/07 0:00	srs
Extraction Time		32.8			hrs			08/22/07 0:00	srs
Leachate pH		6.35			units			08/22/07 0:00	srs
Leachate Volume		2490			mL			08/22/07 0:00	srs
Particle Size over 5 cm		78			%			08/22/07 0:00	srs
Retained Moisture		21.3			%			08/22/07 0:00	srs

Lisbon Valley Mining Company, LLC

Project ID:

Sample ID: GTO6440BED6-8(K)

ACZ Sample ID: **L64270-11**

Date Sampled: 06/01/07 00:00

Date Received: 08/06/07

Sample Matrix: Soil

Metals Analysis

Parameter	EPA Method	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Antimony (MWMT)	M6020 ICP-MS		U	*	mg/L	0.004	0.02	08/28/07 14:43	msh/scp
Arsenic (MWMT)	M6010B ICP		U	*	mg/L	0.04	0.2	08/30/07 12:10	djt
Cadmium (MWMT)	M6010B ICP	0.007	B	*	mg/L	0.005	0.02	08/30/07 12:10	djt
Copper (MWMT)	M6010B ICP	0.05	B	*	mg/L	0.01	0.05	08/30/07 12:10	djt
Molybdenum (MWMT)	M6010B ICP		U	*	mg/L	0.01	0.05	08/31/07 16:50	djt
Selenium (MWMT)	M6010B ICP		U	*	mg/L	0.04	0.2	08/31/07 16:50	djt
Uranium (MWMT)	M6020 ICP-MS		U	*	mg/L	0.001	0.005	08/25/07 10:48	scp
Zinc (MWMT)	M6010B ICP	0.05	B	*	mg/L	0.01	0.05	08/31/07 16:50	djt

Soil Preparation

Parameter	EPA Method	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Meteoritic Water	NDEP - MWMT, Sept. 19, 1990								
Mobility Extraction									
Dry Weight		2450			g			08/22/07 0:00	srs
Extraction pH		5.5			units			08/22/07 0:00	srs
Extraction Time		37.1			hrs			08/22/07 0:00	srs
Leachate pH		4.91			units			08/22/07 0:00	srs
Leachate Volume		2640			mL			08/22/07 0:00	srs
Particle Size over 5 cm		9			%			08/22/07 0:00	srs
Retained Moisture		22.2			%			08/22/07 0:00	srs

Lisbon Valley Mining Company, LLC

Project ID:

Sample ID: SENTWEST6320BED3-5(L)

ACZ Sample ID: **L64270-12**

Date Sampled: 06/01/07 00:00

Date Received: 08/06/07

Sample Matrix: Soil

Metals Analysis

Parameter	EPA Method	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Antimony (MWMT)	M6020 ICP-MS		U	*	mg/L	0.0004	0.002	08/28/07 14:47	msh/scp
Arsenic (MWMT)	M6010B ICP		U	*	mg/L	0.04	0.2	08/30/07 12:14	djt
Cadmium (MWMT)	M6010B ICP	0.005	B	*	mg/L	0.005	0.02	08/30/07 12:14	djt
Copper (MWMT)	M6010B ICP	0.06		*	mg/L	0.01	0.05	08/30/07 12:14	djt
Molybdenum (MWMT)	M6010B ICP		U	*	mg/L	0.01	0.05	08/31/07 16:54	djt
Selenium (MWMT)	M6010B ICP		U	*	mg/L	0.04	0.2	08/31/07 16:54	djt
Uranium (MWMT)	M6020 ICP-MS	0.0007		*	mg/L	0.0001	0.0005	08/25/07 10:43	scp
Zinc (MWMT)	M6010B ICP	0.22		*	mg/L	0.01	0.05	08/31/07 16:54	djt

Soil Preparation

Parameter	EPA Method	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Meteoric Water	NDEP - MWMT, Sept. 19, 1990								
Mobility Extraction									
Dry Weight		2490			g			08/22/07 0:00	srs
Extraction pH		5.5			units			08/22/07 0:00	srs
Extraction Time		28			hrs			08/22/07 0:00	srs
Leachate pH		4.84			units			08/22/07 0:00	srs
Leachate Volume		3300			mL			08/22/07 0:00	srs
Particle Size over 5 cm		69			%			08/22/07 0:00	srs
Retained Moisture		10.8			%			08/22/07 0:00	srs

Report Header Explanations

<i>Batch</i>	A distinct set of samples analyzed at a specific time
<i>Found</i>	Value of the QC Type of interest
<i>Limit</i>	Upper limit for RPD, in %.
<i>Lower</i>	Lower Recovery Limit, in % (except for LCSS, mg/Kg)
<i>MDL</i>	Method Detection Limit. Same as Minimum Reporting Limit. Allows for instrument and annual fluctuations.
<i>PCN/SCN</i>	A number assigned to reagents/standards to trace to the manufacturer's certificate of analysis
<i>PQL</i>	Practical Quantitation Limit, typically 5 times the MDL.
<i>QC</i>	True Value of the Control Sample or the amount added to the Spike
<i>Rec</i>	Amount of the true value or spike added recovered, in % (except for LCSS, mg/Kg)
<i>RPD</i>	Relative Percent Difference, calculation used for Duplicate QC Types
<i>Upper</i>	Upper Recovery Limit, in % (except for LCSS, mg/Kg)
<i>Sample</i>	Value of the Sample of interest

QC Sample Types

<i>AS</i>	Analytical Spike (Post Digestion)	<i>LCSWD</i>	Laboratory Control Sample - Water Duplicate
<i>ASD</i>	Analytical Spike (Post Digestion) Duplicate	<i>LFB</i>	Laboratory Fortified Blank
<i>CCB</i>	Continuing Calibration Blank	<i>LFM</i>	Laboratory Fortified Matrix
<i>CCV</i>	Continuing Calibration Verification standard	<i>LFMD</i>	Laboratory Fortified Matrix Duplicate
<i>DUP</i>	Sample Duplicate	<i>LRB</i>	Laboratory Reagent Blank
<i>ICB</i>	Initial Calibration Blank	<i>MS</i>	Matrix Spike
<i>ICV</i>	Initial Calibration Verification standard	<i>MSD</i>	Matrix Spike Duplicate
<i>ICSAB</i>	Inter-element Correction Standard - A plus B solutions	<i>PBS</i>	Prep Blank - Soil
<i>LCSS</i>	Laboratory Control Sample - Soil	<i>PBW</i>	Prep Blank - Water
<i>LCSSD</i>	Laboratory Control Sample - Soil Duplicate	<i>PQV</i>	Practical Quantitation Verification standard
<i>LCSW</i>	Laboratory Control Sample - Water	<i>SDL</i>	Serial Dilution

QC Sample Type Explanations

Blanks	Verifies that there is no or minimal contamination in the prep method or calibration procedure.
Control Samples	Verifies the accuracy of the method, including the prep procedure.
Duplicates	Verifies the precision of the instrument and/or method.
Spikes/Fortified Matrix	Determines sample matrix interferences, if any.
Standard	Verifies the validity of the calibration.

ACZ Qualifiers (Qual)

B	Analyte concentration detected at a value between MDL and PQL.
H	Analysis exceeded method hold time. pH is a field test with an immediate hold time.
U	Analyte was analyzed for but not detected at the indicated MDL

Method References

- (1) EPA 600/4-83-020. Methods for Chemical Analysis of Water and Wastes, March 1983.
- (2) EPA 600/R-93-100. Methods for the Determination of Inorganic Substances in Environmental Samples, August 1993.
- (3) EPA 600/R-94-111. Methods for the Determination of Metals in Environmental Samples - Supplement I, May 1994.
- (5) EPA SW-846. Test Methods for Evaluating Solid Waste, Third Edition with Update III, December 1996.
- (6) Standard Methods for the Examination of Water and Wastewater, 19th edition, 1995.

Comments

- (1) QC results calculated from raw data. Results may vary slightly if the rounded values are used in the calculations.
- (2) Soil, Sludge, and Plant matrices for Inorganic analyses are reported on a dry weight basis.
- (3) Animal matrices for Inorganic analyses are reported on an "as received" basis.

Lisbon Valley Mining Company, LLC

ACZ Project ID: L64270

Project ID:

Antimony (MWMT)

M6020 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec	Lower	Upper	RPD	Limit	Qual
WG231105													
WG231105ICV	ICV	08/28/07 13:07	MS070731-2	.02		.01892	mg/L	94.6	90	110			
WG231105ICB	ICB	08/28/07 13:11				U	mg/L		-0.0012	0.0012			
WG230898PBS	PBS	08/28/07 13:29				U	mg/L		-0.0012	0.0012			
L64270-02DUP	DUP	08/28/07 13:42			.0006	.00047	mg/L				24.3	20	RA
L64270-04AS	AS	08/28/07 13:55	MS070712-3	.01	.0014	.01169	mg/L	102.9	75	125			
L64270-04ASD	ASD	08/28/07 13:59	MS070712-3	.01	.0014	.01171	mg/L	103.1	75	125	0.17	20	

Arsenic (MWMT)

M6010B ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec	Lower	Upper	RPD	Limit	Qual
WG231280													
WG231280ICV	ICV	08/30/07 10:53	II070821-3	4		3.944	mg/L	98.6	90	110			
WG231280ICB	ICB	08/30/07 10:56				U	mg/L		-0.12	0.12			
WG230898PBS	PBS	08/30/07 11:10				U	mg/L		-0.12	0.12			
L64270-01AS	AS	08/30/07 11:17	II070823-2	1	U	1.151	mg/L	115.1	75	125			
L64270-01ASD	ASD	08/30/07 11:21	II070823-2	1	U	1.087	mg/L	108.7	75	125	5.72	20	
L64270-02DUP	DUP	08/30/07 11:32			U	U	mg/L				0	20	RA

Cadmium (MWMT)

M6010B ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec	Lower	Upper	RPD	Limit	Qual
WG231280													
WG231280ICV	ICV	08/30/07 10:53	II070821-3	2		1.9865	mg/L	99.3	90	110			
WG231280ICB	ICB	08/30/07 10:56				U	mg/L		-0.015	0.015			
WG230898PBS	PBS	08/30/07 11:10				U	mg/L		-0.015	0.015			
L64270-01AS	AS	08/30/07 11:17	II070823-2	.5	5	5.5839	mg/L	116.8	75	125			
L64270-01ASD	ASD	08/30/07 11:21	II070823-2	.5	5	5.5349	mg/L	107	75	125	0.88	20	
L64270-02DUP	DUP	08/30/07 11:32			U	U	mg/L				0	20	RA

Copper (MWMT)

M6010B ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec	Lower	Upper	RPD	Limit	Qual
WG231280													
WG231280ICV	ICV	08/30/07 10:53	II070821-3	2		1.981	mg/L	99.1	90	110			
WG231280ICB	ICB	08/30/07 10:56				U	mg/L		-0.03	0.03			
WG230898PBS	PBS	08/30/07 11:10				U	mg/L		-0.03	0.03			
L64270-01AS	AS	08/30/07 11:17	II070823-2	.5	99.4	100.229	mg/L	165.8	75	125			M3
L64270-01ASD	ASD	08/30/07 11:21	II070823-2	.5	99.4	99.89	mg/L	98	75	125	0.34	20	
L64270-02DUP	DUP	08/30/07 11:32			.04	.01	mg/L				120	20	RA

Molybdenum (MWMT)

M6010B ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec	Lower	Upper	RPD	Limit	Qual
WG231395													
WG231395ICV	ICV	08/31/07 15:33	II070821-3	2		1.974	mg/L	98.7	90	110			
WG231395ICB	ICB	08/31/07 15:36				U	mg/L		-0.03	0.03			
WG230898PBS	PBS	08/31/07 15:50				U	mg/L		-0.03	0.03			
L64270-01AS	AS	08/31/07 15:57	II070829-11	2.5	U	2.207	mg/L	88.3	75	125			
L64270-01ASD	ASD	08/31/07 16:01	II070829-11	2.5	U	2.274	mg/L	91	75	125	2.99	20	
L64270-02DUP	DUP	08/31/07 16:11			U	U	mg/L				0	20	RA

Lisbon Valley Mining Company, LLC

ACZ Project ID: L64270

Project ID:

Selenium (MWMT)

M6010B ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec	Lower	Upper	RPD	Limit	Qual
WG231395													
WG231395ICV	ICV	08/31/07 15:33	II070821-3	4		3.993	mg/L	99.8	90	110			
WG231395ICB	ICB	08/31/07 15:36				U	mg/L		-0.12	0.12			
WG230898PBS	PBS	08/31/07 15:50				U	mg/L		-0.12	0.12			
L64270-01AS	AS	08/31/07 15:57	II070829-11	5	U	4.54	mg/L	90.8	75	125			
L64270-01ASD	ASD	08/31/07 16:01	II070829-11	5	U	4.75	mg/L	95	75	125	4.52	20	
L64270-02DUP	DUP	08/31/07 16:11			U	U	mg/L				0	20	RA

Uranium (MWMT)

M6020 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec	Lower	Upper	RPD	Limit	Qual
WG231012													
WG231012ICV	ICV	08/25/07 9:03	MS070731-2	.05		.05276	mg/L	105.5	90	110			
WG231012ICB	ICB	08/25/07 9:07				U	mg/L		-0.0003	0.0003			
WG230898PBS	PBS	08/25/07 9:26				U	mg/L		-0.0003	0.0003			
L64270-01AS	AS	08/25/07 9:35	MS070712-3	.05	.0377	.0908	mg/L	106.2	75	125			
L64270-01ASD	ASD	08/25/07 9:39	MS070712-3	.05	.0377	.09143	mg/L	107.5	75	125	0.69	20	
L64270-02DUP	DUP	08/25/07 9:48			.0047	.00393	mg/L				17.8	20	

Zinc (MWMT)

M6010B ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec	Lower	Upper	RPD	Limit	Qual
WG231395													
WG231395ICV	ICV	08/31/07 15:33	II070821-3	2		1.957	mg/L	97.9	90	110			
WG231395ICB	ICB	08/31/07 15:36				U	mg/L		-0.03	0.03			
WG230898PBS	PBS	08/31/07 15:50				.024	mg/L		-0.03	0.03			
L64270-01AS	AS	08/31/07 15:57	II070829-11	2.5	15.7	22.504	mg/L	272.2	75	125			M3
L64270-01ASD	ASD	08/31/07 16:01	II070829-11	2.5	15.7	22.942	mg/L	289.7	75	125	1.93	20	M3
L64270-02DUP	DUP	08/31/07 16:11			.02	.027	mg/L				29.8	20	RA

Lisbon Valley Mining Company, LLC

ACZ Project ID: **L64270**

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L64270-01	WG231105	Antimony (MWMT)	M6020 ICP-MS	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
	WG231280	Arsenic (MWMT)	M6010B ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
		Cadmium (MWMT)	M6010B ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
		Copper (MWMT)	M6010B ICP	M3	The accuracy of the spike recovery does not apply because analyte concentration in the sample is disproportionate to the spike level. The recovery of the method control sample was acceptable.
			M6010B ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
	WG231395	Molybdenum (MWMT)	M6010B ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
		Selenium (MWMT)	M6010B ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
		Zinc (MWMT)	M6010B ICP	M3	The accuracy of the spike recovery does not apply because analyte concentration in the sample is disproportionate to the spike level. The recovery of the method control sample was acceptable.
			M6010B ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
			M6010B ICP	ZH	Serial Dilution exceeded method limits. Matrix interference [physical or chemical] is suspected.
L64270-02	WG231105	Antimony (MWMT)	M6020 ICP-MS	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
	WG231280	Arsenic (MWMT)	M6010B ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
		Cadmium (MWMT)	M6010B ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
		Copper (MWMT)	M6010B ICP	M3	The accuracy of the spike recovery does not apply because analyte concentration in the sample is disproportionate to the spike level. The recovery of the method control sample was acceptable.
			M6010B ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
	WG231395	Molybdenum (MWMT)	M6010B ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
		Selenium (MWMT)	M6010B ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
		Zinc (MWMT)	M6010B ICP	M3	The accuracy of the spike recovery does not apply because analyte concentration in the sample is disproportionate to the spike level. The recovery of the method control sample was acceptable.
			M6010B ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
			M6010B ICP	ZH	Serial Dilution exceeded method limits. Matrix interference [physical or chemical] is suspected.

Lisbon Valley Mining Company, LLC

ACZ Project ID: **L64270**

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L64270-03	WG231280	Arsenic (MWMT)	M6010B ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
		Cadmium (MWMT)	M6010B ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
		Copper (MWMT)	M6010B ICP	M3	The accuracy of the spike recovery does not apply because analyte concentration in the sample is disproportionate to the spike level. The recovery of the method control sample was acceptable.
			M6010B ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
	WG231395	Molybdenum (MWMT)	M6010B ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
		Selenium (MWMT)	M6010B ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
		Zinc (MWMT)	M6010B ICP	M3	The accuracy of the spike recovery does not apply because analyte concentration in the sample is disproportionate to the spike level. The recovery of the method control sample was acceptable.
			M6010B ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
			M6010B ICP	ZH	Serial Dilution exceeded method limits. Matrix interference [physical or chemical] is suspected.
L64270-04	WG231280	Arsenic (MWMT)	M6010B ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
		Cadmium (MWMT)	M6010B ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
		Copper (MWMT)	M6010B ICP	M3	The accuracy of the spike recovery does not apply because analyte concentration in the sample is disproportionate to the spike level. The recovery of the method control sample was acceptable.
			M6010B ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
	WG231395	Molybdenum (MWMT)	M6010B ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
		Selenium (MWMT)	M6010B ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
		Zinc (MWMT)	M6010B ICP	M3	The accuracy of the spike recovery does not apply because analyte concentration in the sample is disproportionate to the spike level. The recovery of the method control sample was acceptable.
			M6010B ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
			M6010B ICP	ZH	Serial Dilution exceeded method limits. Matrix interference [physical or chemical] is suspected.

Lisbon Valley Mining Company, LLC

ACZ Project ID: **L64270**

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L64270-05	WG231105	Antimony (MWMt)	M6020 ICP-MS	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
	WG231280	Arsenic (MWMt)	M6010B ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
		Cadmium (MWMt)	M6010B ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
		Copper (MWMt)	M6010B ICP	M3	The accuracy of the spike recovery does not apply because analyte concentration in the sample is disproportionate to the spike level. The recovery of the method control sample was acceptable.
			M6010B ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
	WG231395	Molybdenum (MWMt)	M6010B ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
		Selenium (MWMt)	M6010B ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
		Zinc (MWMt)	M6010B ICP	M3	The accuracy of the spike recovery does not apply because analyte concentration in the sample is disproportionate to the spike level. The recovery of the method control sample was acceptable.
			M6010B ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
			M6010B ICP	ZH	Serial Dilution exceeded method limits. Matrix interference [physical or chemical] is suspected.
L64270-06	WG231105	Antimony (MWMt)	M6020 ICP-MS	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
	WG231280	Arsenic (MWMt)	M6010B ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
		Cadmium (MWMt)	M6010B ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
		Copper (MWMt)	M6010B ICP	M3	The accuracy of the spike recovery does not apply because analyte concentration in the sample is disproportionate to the spike level. The recovery of the method control sample was acceptable.
			M6010B ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
	WG231395	Molybdenum (MWMt)	M6010B ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
		Selenium (MWMt)	M6010B ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
		Zinc (MWMt)	M6010B ICP	M3	The accuracy of the spike recovery does not apply because analyte concentration in the sample is disproportionate to the spike level. The recovery of the method control sample was acceptable.
			M6010B ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
			M6010B ICP	ZH	Serial Dilution exceeded method limits. Matrix interference [physical or chemical] is suspected.

Lisbon Valley Mining Company, LLC

ACZ Project ID: **L64270**

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L64270-07	WG231105	Antimony (MWMT)	M6020 ICP-MS	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
	WG231280	Arsenic (MWMT)	M6010B ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
		Cadmium (MWMT)	M6010B ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
		Copper (MWMT)	M6010B ICP	M3	The accuracy of the spike recovery does not apply because analyte concentration in the sample is disproportionate to the spike level. The recovery of the method control sample was acceptable.
	WG231395	Molybdenum (MWMT)	M6010B ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
			M6010B ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
			M6010B ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
		Zinc (MWMT)	M6010B ICP	M3	The accuracy of the spike recovery does not apply because analyte concentration in the sample is disproportionate to the spike level. The recovery of the method control sample was acceptable.
			M6010B ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
			M6010B ICP	ZH	Serial Dilution exceeded method limits. Matrix interference [physical or chemical] is suspected.
L64270-08	WG231105	Antimony (MWMT)	M6020 ICP-MS	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
	WG231280	Arsenic (MWMT)	M6010B ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
		Cadmium (MWMT)	M6010B ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
		Copper (MWMT)	M6010B ICP	M3	The accuracy of the spike recovery does not apply because analyte concentration in the sample is disproportionate to the spike level. The recovery of the method control sample was acceptable.
	WG231395	Molybdenum (MWMT)	M6010B ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
			M6010B ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
			M6010B ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
		Zinc (MWMT)	M6010B ICP	M3	The accuracy of the spike recovery does not apply because analyte concentration in the sample is disproportionate to the spike level. The recovery of the method control sample was acceptable.
			M6010B ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
			M6010B ICP	ZH	Serial Dilution exceeded method limits. Matrix interference [physical or chemical] is suspected.

Lisbon Valley Mining Company, LLC

ACZ Project ID: **L64270**

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L64270-09	WG231105	Antimony (MWMT)	M6020 ICP-MS	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
	WG231280	Arsenic (MWMT)	M6010B ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
		Cadmium (MWMT)	M6010B ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
		Copper (MWMT)	M6010B ICP	M3	The accuracy of the spike recovery does not apply because analyte concentration in the sample is disproportionate to the spike level. The recovery of the method control sample was acceptable.
	WG231395	Molybdenum (MWMT)	M6010B ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
			M6010B ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
		Selenium (MWMT)	M6010B ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
		Zinc (MWMT)	M6010B ICP	M3	The accuracy of the spike recovery does not apply because analyte concentration in the sample is disproportionate to the spike level. The recovery of the method control sample was acceptable.
			M6010B ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
			M6010B ICP	ZH	Serial Dilution exceeded method limits. Matrix interference [physical or chemical] is suspected.
L64270-10	WG231105	Antimony (MWMT)	M6020 ICP-MS	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
	WG231280	Arsenic (MWMT)	M6010B ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
		Cadmium (MWMT)	M6010B ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
		Copper (MWMT)	M6010B ICP	M3	The accuracy of the spike recovery does not apply because analyte concentration in the sample is disproportionate to the spike level. The recovery of the method control sample was acceptable.
	WG231395	Molybdenum (MWMT)	M6010B ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
			M6010B ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
		Selenium (MWMT)	M6010B ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
		Zinc (MWMT)	M6010B ICP	M3	The accuracy of the spike recovery does not apply because analyte concentration in the sample is disproportionate to the spike level. The recovery of the method control sample was acceptable.
			M6010B ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
			M6010B ICP	ZH	Serial Dilution exceeded method limits. Matrix interference [physical or chemical] is suspected.

Lisbon Valley Mining Company, LLC**ACZ Project ID: L64270**

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L64270-11	WG231105	Antimony (MWMT)	M6020 ICP-MS	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
	WG231280	Arsenic (MWMT)	M6010B ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
		Cadmium (MWMT)	M6010B ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
		Copper (MWMT)	M6010B ICP	M3	The accuracy of the spike recovery does not apply because analyte concentration in the sample is disproportionate to the spike level. The recovery of the method control sample was acceptable.
			M6010B ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
	WG231395	Molybdenum (MWMT)	M6010B ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
		Selenium (MWMT)	M6010B ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
		Zinc (MWMT)	M6010B ICP	M3	The accuracy of the spike recovery does not apply because analyte concentration in the sample is disproportionate to the spike level. The recovery of the method control sample was acceptable.
			M6010B ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
			M6010B ICP	ZH	Serial Dilution exceeded method limits. Matrix interference [physical or chemical] is suspected.
L64270-12	WG231105	Antimony (MWMT)	M6020 ICP-MS	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
	WG231280	Arsenic (MWMT)	M6010B ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
		Cadmium (MWMT)	M6010B ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
		Copper (MWMT)	M6010B ICP	M3	The accuracy of the spike recovery does not apply because analyte concentration in the sample is disproportionate to the spike level. The recovery of the method control sample was acceptable.
			M6010B ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
	WG231395	Molybdenum (MWMT)	M6010B ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
		Selenium (MWMT)	M6010B ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
		Zinc (MWMT)	M6010B ICP	M3	The accuracy of the spike recovery does not apply because analyte concentration in the sample is disproportionate to the spike level. The recovery of the method control sample was acceptable.
			M6010B ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
			M6010B ICP	ZH	Serial Dilution exceeded method limits. Matrix interference [physical or chemical] is suspected.

Lisbon Valley Mining Company, LLC

ACZ Project ID: **L64270**

Metals Analysis

The following parameters are not offered for certification or are not covered by NELAC certificate #ACZ.

Uranium (MWMT)

M6020 ICP-MS

Lisbon Valley Mining Company, LLC

ACZ Project ID: L64270
Date Received: 8/6/2007
Received By:
Date Printed: 8/6/2007

Receipt Verification

	YES	NO	NA
1) Does this project require special handling procedures such as CLP protocol?			X
2) Are the custody seals on the cooler intact?			X
3) Are the custody seals on the sample containers intact?			X
4) Is there a Chain of Custody or other directive shipping papers present?	X		
5) Is the Chain of Custody complete?	X		
6) Is the Chain of Custody in agreement with the samples received?	X		
7) Is there enough sample for all requested analyses?	X		
8) Are all samples within holding times for requested analyses?	X		
9) Were all sample containers received intact?	X		
10) Are the temperature blanks present?			X
11) Are the trip blanks (VOA and/or Cyanide) present?			X
12) Are samples requiring no headspace, headspace free?			X
13) Do the samples that require a Foreign Soils Permit have one?			X

Exceptions: If you answered no to any of the above questions, please describe

N/A

Contact (For any discrepancies, the client must be contacted)

N/A

Shipping Containers

Cooler Id	Temp (°C)	Rad (µR/hr)
1541	19.6	20
1849	20.8	16
1850	20.8	16

Client must contact ACZ Project Manager if analysis should not proceed for samples received outside of thermal preservation acceptance criteria.

Notes

Lisbon Valley Mining Company, LLC

ACZ Project ID: L64270
Date Received: 8/6/2007
Received By:

Sample Container Preservation

SAMPLE	CLIENT ID	R < 2	G < 2	BK < 2	Y < 2	YG < 2	B < 2	O < 2	T > 12	N/A	RAD	ID
L64270-01	CENT6360BED6-8(A)									X		
L64270-02	CENT6360BED14(B)									X		
L64270-03	CENT6360BED3-5(C)									X		
L64270-04	CENT6360BED2(D)									X		
L64270-05	SENTWEST6300BED6-8(E)									X		
L64270-06	SENTWEST6300BED14(F)									X		
L64270-07	CENT6360BED11-13(G)									X		
L64270-08	CENT6360BED9-10(H)									X		
L64270-09	SENTW6260BED9-10(I)									X		
L64270-10	GTO6440BED2(J)									X		
L64270-11	GTO6440BED6-8(K)									X		
L64270-12	SENTWEST6320BED3-5(L)									X		

Sample Container Preservation Legend

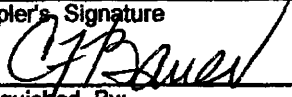
Abbreviation	Description	Container Type	Preservative/Limits
R	Raw/Nitric	RED	pH must be < 2
B	Filtered/Sulfuric	BLUE	pH must be < 2
BK	Filtered/Nitric	BLACK	pH must be < 2
G	Filtered/Nitric	GREEN	pH must be < 2
O	Raw/Sulfuric	ORANGE	pH must be < 2
P	Raw/NaOH	PURPLE	pH must be > 12 *
T	Raw/NaOH Zinc Acetate	TAN	pH must be > 12
Y	Raw/Sulfuric	YELLOW	pH must be < 2
YG	Raw/Sulfuric	YELLOW GLASS	pH must be < 2
N/A	No preservative needed	Not applicable	
RAD	Gamma/Beta dose rate	Not applicable	must be < 250 µR/hr

* pH check performed by analyst prior to sample preparation

Sample IDs Reviewed By: _____

L64270

Lisbon Valley Mining Co.				Chain of Custody Record				
P.O. Box 248 920 S. County Rd. 313 La Sal, Utah 84530 Phone: (435) 686-9950				Send report with laboratory QA to: 920 S County Rd 313 La Sal, Utah 84530				
Lisbon Valley Copper Project			ANALYSES				Number of Containers	ACZ Laboratories, Inc. 2773 Downhill Drive Steamboat Springs, CO (970) 879-6590 Remarks / Comments
SAMPLE NUMBER	DATE	TIME	MWMP					
1 Cent 6360 Bed 6-8 (A)	April 07		x				1	Composite samples per suffix (ie. A-J)
2 Cent 6360 Bed 14 (B)	April 07		x				1	As Above
3 Cent 6360 Bed 3-5 (C)	April 07		x				1	As Above
4 Cent 6360 Bed 2 (D)	April 07		x				1	As Above
5 Sent West 6300 Bed 6-8 (E)	April 07		x				1	As Above
6 Sent West 6300 Bed 14 (F)	April 07		x				1	As Above
7 Cent 6360 Bed 11-13 (G)	April 07		x				1	As Above
3 Cent 6360 Bed 3-5 (C)	May 07		x				1	As Above
4 Cent 6360 Bed 2 (D)	May 07		x				1	As Above
2 Cent 6360 Bed 14 (B)	May 07		x				1	As Above
1 Cent 6360 Bed 6-8 (A)	May 07		x				1	As Above
7 Cent 6360 Bed 11-13 (G)	May 07		x				1	As Above
9 Cent 6360 Bed 9-10 (H)	May 07		x				1	As Above
2 Sent W 6260 Bed 9-10 (I)	June 07		x				1	As Above
10 Cent 6360 Bed 14 (B)	June 07		x				1	As Above
GTO 6440 Bed 2 (J)	June 07		x				1	As Above
Sampled By: Charles Bauer			Total Number of Containers				16	
Sampler's Signature <i>Charles Bauer</i>			Contact Person: Lantz M Indergard Phone: (435) 686-9950 ext. 226 Fax: (435) 686-2223					
Relinquished By: Lantz Indergard			Date / Time: 8-20-07 9:37 AM		Received By: RL		Date / Time: 8-20-07 10:47	
Method of Shipment: UPS			Comments: These samples are to be composited to represent 2nd Qtr 2007. The letter suffix identifies one analysis of up to 3 samples					

Lisbon Valley Mining Co.				Chain of Custody Record				
P.O. Box 248 920 S. County Rd. 313 La Sal, Utah 84530 Phone: (435) 686-9950				Send report with laboratory QA to: 920 S County Rd 313 La Sal, Utah 84530				
Lisbon Valley Copper Project			ANALYSES				Number of Containers	ACZ Laboratories, Inc. 2773 Downhill Drive Steamboat Springs, CO (970) 879-6590
SAMPLE NUMBER	DATE	TIME	MWMP					
Cent 6360 Bed 2 (D)	June 07		x				1	Composite samples per suffix (ie. A-J)
Cent 6360 Bed 11-13 (G)	June 07		x				1	As Above
Cent 6360 Bed 6-8 (A)	June 07		x				1	As Above
Sent West 6260 Bed 14 (F)	June 07		x				1	As Above
Cent 6360 Bed 9-10 (H)	June 07		x				1	As Above
Cent 6360 Bed 3-5 (C)	June 07		x				1	As Above
Sent W 6280 Bed 9-10 (I)	June 07		x				1	As Above
Sent West 6280 Bed 14 (F)	May 07		x				1	As Above
GTO 6440 Bed 6-8 (K)	June 07		x				1	As Above
Sent West 6320 Bed 3-5 (L)	May 07		x				1	As Above
Sampled By: Charles Bauer			Total Number of Containers				10	
Sampler's Signature 			Contact Person: Lantz M Indergard Phone: (435) 686-9950 ext. 226 Fax: (435) 686-2223					
Relinquished By: Lantz Indergard			Date / Time:				Received By: Date / Time:	
Method of Shipment: UPS			Comments: These samples are to be composited to represent 2nd Qtr 2007 The letter suffix identifies one analysis of up to 3 samples					

December 13, 2007

Report to:

Lantz Indergard
Lisbon Valley Mining Company, LLC
P.O. Box 248
La Sal, UT 84530

Bill to:

Lantz Indergard
Lisbon Valley Mining Company, LLC
P.O. Box 248
La Sal, UT 84530

cc: Chuck Bauer, Susan Wyman

Project ID:

ACZ Project ID: L66277

Lantz Indergard:

Enclosed are the analytical results for sample(s) submitted to ACZ Laboratories, Inc. (ACZ) on November 13, 2007. This project has been assigned to ACZ's project number, L66277. Please reference this number in all future inquiries.

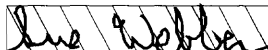
All analyses were performed according to ACZ's Quality Assurance Plan, version 12.0. The enclosed results relate only to the samples received under L66277. Each section of this report has been reviewed and approved by the appropriate Laboratory Supervisor, or a qualified substitute.

Except as noted, the test results for the methods and parameters listed on ACZ's current NELAC certificate letter (#ACZ) meet all requirements of NELAC.

This report shall be used or copied only in its entirety. ACZ is not responsible for the consequences arising from the use of a partial report.

All samples and sub-samples associated with this project will be disposed of after January 13, 2008. If the samples are determined to be hazardous, additional charges apply for disposal (typically less than \$10/sample). If you would like the samples to be held longer than ACZ's stated policy or to be returned, please contact your Project Manager or Customer Service Representative for further details and associated costs. ACZ retains analytical reports for five years.

If you have any questions or other needs, please contact your Project Manager.



13/Dec/07

Sue Webber, Project Manager, has reviewed and approved this report in its entirety.



ACZ Laboratories, Inc.

2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

Inorganic Analytical Results

Lisbon Valley Mining Company, LLC

Project ID:

Sample ID: C 6340 B 11-13(A)

ACZ Sample ID: **L66277-01**

Date Sampled: 07/01/07 00:00

Date Received: 11/13/07

Sample Matrix: Soil

Metals Analysis

Parameter	EPA Method	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Antimony (MWMT)	M6020 ICP-MS	0.0018	B	*	mg/L	0.0004	0.002	12/05/07 8:03	scp
Arsenic (MWMT)	M6010B ICP		U	*	mg/L	0.04	0.2	12/06/07 13:57	djt
Cadmium (MWMT)	M6010B ICP	0.006	B	*	mg/L	0.005	0.02	12/06/07 13:57	djt
Copper (MWMT)	M6010B ICP	0.04	B	*	mg/L	0.01	0.05	12/06/07 13:57	djt
Molybdenum (MWMT)	M6010B ICP	0.38		*	mg/L	0.01	0.05	12/06/07 13:57	djt
Selenium (MWMT)	M6010B ICP		U	*	mg/L	0.04	0.2	12/06/07 13:57	djt
Uranium (MWMT)	M6020 ICP-MS	0.0150		*	mg/L	0.0001	0.0005	12/05/07 8:03	scp
Zinc (MWMT)	M6010B ICP		U	*	mg/L	0.01	0.05	12/06/07 13:57	djt

Soil Preparation

Parameter	EPA Method	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Meteoric Water	NDEP - MWMT, Sept. 19, 1990								
Mobility Extraction									
Dry Weight		4990			g			11/28/07 0:00	lwt/bjl
Extraction pH		5.7			units			11/28/07 0:00	lwt/bjl
Extraction Time		29			hrs			11/28/07 0:00	lwt/bjl
Leachate pH		7.6			units			11/28/07 0:00	lwt/bjl
Leachate Volume		4930			mL			11/28/07 0:00	lwt/bjl
Particle Size over 5 cm		44			%			11/28/07 0:00	lwt/bjl
Retained Moisture		16.3			%			11/28/07 0:00	lwt/bjl

Lisbon Valley Mining Company, LLC

Project ID:

Sample ID: C 6340 B 14(B)

ACZ Sample ID: **L66277-02**

Date Sampled: 07/01/07 00:00

Date Received: 11/13/07

Sample Matrix: Soil

Metals Analysis

Parameter	EPA Method	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Antimony (MWMT)	M6020 ICP-MS		U	*	mg/L	0.0004	0.002	12/05/07 8:12	scp
Arsenic (MWMT)	M6010B ICP		U	*	mg/L	0.04	0.2	12/06/07 14:13	djt
Cadmium (MWMT)	M6010B ICP		U	*	mg/L	0.005	0.02	12/06/07 14:13	djt
Copper (MWMT)	M6010B ICP	0.03	B	*	mg/L	0.01	0.05	12/06/07 14:13	djt
Molybdenum (MWMT)	M6010B ICP		U	*	mg/L	0.01	0.05	12/06/07 14:13	djt
Selenium (MWMT)	M6010B ICP		U	*	mg/L	0.04	0.2	12/06/07 14:13	djt
Uranium (MWMT)	M6020 ICP-MS	0.0013		*	mg/L	0.0001	0.0005	12/05/07 8:12	scp
Zinc (MWMT)	M6010B ICP		U	*	mg/L	0.01	0.05	12/06/07 14:13	djt

Soil Preparation

Parameter	EPA Method	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Meteoric Water	NDEP - MWMT, Sept. 19, 1990								
Mobility Extraction									
Dry Weight		4990			g			11/28/07 0:00	lwt/bjl
Extraction pH		5.7			units			11/28/07 0:00	lwt/bjl
Extraction Time		33.5			hrs			11/28/07 0:00	lwt/bjl
Leachate pH		8.1			units			11/28/07 0:00	lwt/bjl
Leachate Volume		4900			mL			11/28/07 0:00	lwt/bjl
Particle Size over 5 cm		70			%			11/28/07 0:00	lwt/bjl
Retained Moisture		12.6			%			11/28/07 0:00	lwt/bjl

Lisbon Valley Mining Company, LLC

Project ID:

Sample ID: C 6340 B 3-5(C)

ACZ Sample ID: **L66277-03**

Date Sampled: 08/01/07 00:00

Date Received: 11/13/07

Sample Matrix: Soil

Metals Analysis

Parameter	EPA Method	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Antimony (MWMT)	M6020 ICP-MS	0.0005	B	*	mg/L	0.0004	0.002	12/05/07 8:25	scp
Arsenic (MWMT)	M6010B ICP	0.04	B	*	mg/L	0.04	0.2	12/06/07 14:23	djt
Cadmium (MWMT)	M6010B ICP	12.900		*	mg/L	0.005	0.02	12/06/07 14:23	djt
Copper (MWMT)	M6010B ICP	394		*	mg/L	0.1	0.5	12/11/07 21:38	erf
Molybdenum (MWMT)	M6010B ICP		U	*	mg/L	0.01	0.05	12/06/07 14:23	djt
Selenium (MWMT)	M6010B ICP	0.11	B	*	mg/L	0.04	0.2	12/06/07 14:23	djt
Uranium (MWMT)	M6020 ICP-MS	0.0073		*	mg/L	0.0001	0.0005	12/05/07 8:25	scp
Zinc (MWMT)	M6010B ICP	76.00		*	mg/L	0.01	0.05	12/06/07 14:23	djt

Soil Preparation

Parameter	EPA Method	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Meteoritic Water	NDEP - MWMT, Sept. 19, 1990								
Mobility Extraction									
Dry Weight		5000			g			11/29/07 0:00	lwt/bjl
Extraction pH		5.7			units			11/29/07 0:00	lwt/bjl
Extraction Time		32.5			hrs			11/29/07 0:00	lwt/bjl
Leachate pH		5.2			units			11/29/07 0:00	lwt/bjl
Leachate Volume		4860			mL			11/29/07 0:00	lwt/bjl
Particle Size over 5 cm		70			%			11/29/07 0:00	lwt/bjl
Retained Moisture		17.4			%			11/29/07 0:00	lwt/bjl

Lisbon Valley Mining Company, LLC

Project ID:

Sample ID: C 6340 B 6-8(D)

ACZ Sample ID: **L66277-04**

Date Sampled: 08/01/07 00:00

Date Received: 11/13/07

Sample Matrix: Soil

Metals Analysis

Parameter	EPA Method	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Antimony (MWMt)	M6020 ICP-MS		U	*	mg/L	0.0004	0.002	12/05/07 8:38	scp
Arsenic (MWMt)	M6010B ICP	0.05	B	*	mg/L	0.04	0.2	12/06/07 14:26	djt
Cadmium (MWMt)	M6010B ICP	3.540		*	mg/L	0.005	0.02	12/06/07 14:26	djt
Copper (MWMt)	M6010B ICP	14.30		*	mg/L	0.01	0.05	12/06/07 14:26	djt
Molybdenum (MWMt)	M6010B ICP		U	*	mg/L	0.01	0.05	12/06/07 14:26	djt
Selenium (MWMt)	M6010B ICP		U	*	mg/L	0.04	0.2	12/06/07 14:26	djt
Uranium (MWMt)	M6020 ICP-MS	0.0011		*	mg/L	0.0001	0.0005	12/05/07 8:38	scp
Zinc (MWMt)	M6010B ICP	20.50		*	mg/L	0.01	0.05	12/06/07 14:26	djt

Soil Preparation

Parameter	EPA Method	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Meteoric Water	NDEP - MWMt, Sept. 19, 1990								
Mobility Extraction									
Dry Weight		4950			g			11/29/07 0:00	lwt/bjl
Extraction pH		5.7			units			11/29/07 0:00	lwt/bjl
Extraction Time		29			hrs			11/29/07 0:00	lwt/bjl
Leachate pH		6			units			11/29/07 0:00	lwt/bjl
Leachate Volume		5380			mL			11/29/07 0:00	lwt/bjl
Particle Size over 5 cm		55			%			11/29/07 0:00	lwt/bjl
Retained Moisture		14.9			%			11/29/07 0:00	lwt/bjl

Lisbon Valley Mining Company, LLC

Project ID:

Sample ID: C 6340 B 9-10(E)

ACZ Sample ID: **L66277-05**

Date Sampled: 08/01/07 00:00

Date Received: 11/13/07

Sample Matrix: Soil

Metals Analysis

Parameter	EPA Method	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Antimony (MWMT)	M6020 ICP-MS	0.0046		*	mg/L	0.0004	0.002	12/05/07 8:42	scp
Arsenic (MWMT)	M6010B ICP		U	*	mg/L	0.04	0.2	12/06/07 14:30	djt
Cadmium (MWMT)	M6010B ICP		U	*	mg/L	0.005	0.02	12/06/07 14:30	djt
Copper (MWMT)	M6010B ICP	0.01	B	*	mg/L	0.01	0.05	12/06/07 14:30	djt
Molybdenum (MWMT)	M6010B ICP	1.68		*	mg/L	0.01	0.05	12/06/07 14:30	djt
Selenium (MWMT)	M6010B ICP	0.07	B	*	mg/L	0.04	0.2	12/06/07 14:30	djt
Uranium (MWMT)	M6020 ICP-MS	0.0073		*	mg/L	0.0001	0.0005	12/05/07 8:42	scp
Zinc (MWMT)	M6010B ICP		U	*	mg/L	0.01	0.05	12/06/07 14:30	djt

Soil Preparation

Parameter	EPA Method	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Meteoric Water	NDEP - MWMT, Sept. 19, 1990								
Mobility Extraction									
Dry Weight		4960			g			11/29/07 0:00	lwt/bjl
Extraction pH		5.7			units			11/29/07 0:00	lwt/bjl
Extraction Time		33.5			hrs			11/29/07 0:00	lwt/bjl
Leachate pH		8			units			11/29/07 0:00	lwt/bjl
Leachate Volume		4880			mL			11/29/07 0:00	lwt/bjl
Particle Size over 5 cm		44			%			11/29/07 0:00	lwt/bjl
Retained Moisture		15.9			%			11/29/07 0:00	lwt/bjl

Lisbon Valley Mining Company, LLC

Project ID:

Sample ID: C 6340 B 2(F)

ACZ Sample ID: **L66277-06**

Date Sampled: 08/01/07 00:00

Date Received: 11/13/07

Sample Matrix: Soil

Metals Analysis

Parameter	EPA Method	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Antimony (MWMT)	M6020 ICP-MS	0.0048		*	mg/L	0.0004	0.002	12/05/07 8:47	scp
Arsenic (MWMT)	M6010B ICP	0.04	B	*	mg/L	0.04	0.2	12/06/07 14:33	djt
Cadmium (MWMT)	M6010B ICP		U	*	mg/L	0.005	0.02	12/06/07 14:33	djt
Copper (MWMT)	M6010B ICP	0.02	B	*	mg/L	0.01	0.05	12/06/07 14:33	djt
Molybdenum (MWMT)	M6010B ICP	0.12		*	mg/L	0.01	0.05	12/06/07 14:33	djt
Selenium (MWMT)	M6010B ICP		U	*	mg/L	0.04	0.2	12/06/07 14:33	djt
Uranium (MWMT)	M6020 ICP-MS	0.0029		*	mg/L	0.0001	0.0005	12/05/07 8:47	scp
Zinc (MWMT)	M6010B ICP		U	*	mg/L	0.01	0.05	12/06/07 14:33	djt

Soil Preparation

Parameter	EPA Method	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Meteoric Water	NDEP - MWMT, Sept. 19, 1990								
Mobility Extraction									
Dry Weight		3950			g			11/30/07 0:00	lwt/bjl
Extraction pH		5.7			units			11/30/07 0:00	lwt/bjl
Extraction Time		27.5			hrs			11/30/07 0:00	lwt/bjl
Leachate pH		8.1			units			11/30/07 0:00	lwt/bjl
Leachate Volume		4030			mL			11/30/07 0:00	lwt/bjl
Particle Size over 5 cm		46			%			11/30/07 0:00	lwt/bjl
Retained Moisture		23.1			%			11/30/07 0:00	lwt/bjl

Lisbon Valley Mining Company, LLC

Project ID:

Sample ID: SW B 9-10(G)

ACZ Sample ID: **L66277-07**

Date Sampled: 07/01/07 00:00

Date Received: 11/13/07

Sample Matrix: Soil

Metals Analysis

Parameter	EPA Method	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Antimony (MWMT)	M6020 ICP-MS	0.0024		*	mg/L	0.0004	0.002	12/05/07 8:56	scp
Arsenic (MWMT)	M6010B ICP		U	*	mg/L	0.04	0.2	12/06/07 14:36	djt
Cadmium (MWMT)	M6010B ICP		U	*	mg/L	0.005	0.02	12/06/07 14:36	djt
Copper (MWMT)	M6010B ICP		U	*	mg/L	0.01	0.05	12/06/07 14:36	djt
Molybdenum (MWMT)	M6010B ICP	0.83		*	mg/L	0.01	0.05	12/06/07 14:36	djt
Selenium (MWMT)	M6010B ICP	0.08	B	*	mg/L	0.04	0.2	12/06/07 14:36	djt
Uranium (MWMT)	M6020 ICP-MS	0.0114		*	mg/L	0.0001	0.0005	12/05/07 8:56	scp
Zinc (MWMT)	M6010B ICP		U	*	mg/L	0.01	0.05	12/06/07 14:36	djt

Soil Preparation

Parameter	EPA Method	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Meteoritic Water	NDEP - MWMT, Sept. 19, 1990								
Mobility Extraction									
Dry Weight		3970			g			11/30/07 0:00	lwt/bjl
Extraction pH		5.7			units			11/30/07 0:00	lwt/bjl
Extraction Time		27.5			hrs			11/30/07 0:00	lwt/bjl
Leachate pH		8			units			11/30/07 0:00	lwt/bjl
Leachate Volume		3970			mL			11/30/07 0:00	lwt/bjl
Particle Size over 5 cm		70			%			11/30/07 0:00	lwt/bjl
Retained Moisture		22.1			%			11/30/07 0:00	lwt/bjl

Lisbon Valley Mining Company, LLC

Project ID:

Sample ID: GTO 6440 B 6-8(H)

ACZ Sample ID: **L66277-08**

Date Sampled: 08/01/07 00:00

Date Received: 11/13/07

Sample Matrix: Soil

Metals Analysis

Parameter	EPA Method	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Antimony (MWMT)	M6020 ICP-MS	0.0008	B	*	mg/L	0.0004	0.002	12/05/07 9:00	scp
Arsenic (MWMT)	M6010B ICP		U	*	mg/L	0.04	0.2	12/06/07 14:40	djt
Cadmium (MWMT)	M6010B ICP	0.020		*	mg/L	0.005	0.02	12/06/07 14:40	djt
Copper (MWMT)	M6010B ICP	0.06		*	mg/L	0.01	0.05	12/06/07 14:40	djt
Molybdenum (MWMT)	M6010B ICP		U	*	mg/L	0.01	0.05	12/06/07 14:40	djt
Selenium (MWMT)	M6010B ICP	0.05	B	*	mg/L	0.04	0.2	12/06/07 14:40	djt
Uranium (MWMT)	M6020 ICP-MS	0.0025		*	mg/L	0.0001	0.0005	12/05/07 9:00	scp
Zinc (MWMT)	M6010B ICP	2.98		*	mg/L	0.01	0.05	12/06/07 14:40	djt

Soil Preparation

Parameter	EPA Method	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Meteoritic Water	NDEP - MWMT, Sept. 19, 1990								
Mobility Extraction									
Dry Weight		3250			g			11/30/07 0:00	lwt/bjl
Extraction pH		5.7			units			11/30/07 0:00	lwt/bjl
Extraction Time		30.5			hrs			11/30/07 0:00	lwt/bjl
Leachate pH		3.4			units			11/30/07 0:00	lwt/bjl
Leachate Volume		3210			mL			11/30/07 0:00	lwt/bjl
Particle Size over 5 cm		70			%			11/30/07 0:00	lwt/bjl
Retained Moisture		17.9			%			11/30/07 0:00	lwt/bjl

Lisbon Valley Mining Company, LLC

Project ID:

Sample ID: GTO 6440 B 2(I)

ACZ Sample ID: **L66277-09**

Date Sampled: 07/01/07 00:00

Date Received: 11/13/07

Sample Matrix: Soil

Metals Analysis

Parameter	EPA Method	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Antimony (MWMT)	M6020 ICP-MS	0.0004	B	*	mg/L	0.0004	0.002	12/05/07 9:04	scp
Arsenic (MWMT)	M6010B ICP	0.05	B	*	mg/L	0.04	0.2	12/06/07 14:43	djt
Cadmium (MWMT)	M6010B ICP		U	*	mg/L	0.005	0.02	12/06/07 14:43	djt
Copper (MWMT)	M6010B ICP	0.01	B	*	mg/L	0.01	0.05	12/06/07 14:43	djt
Molybdenum (MWMT)	M6010B ICP	0.02	B	*	mg/L	0.01	0.05	12/06/07 14:43	djt
Selenium (MWMT)	M6010B ICP	0.10	B	*	mg/L	0.04	0.2	12/06/07 14:43	djt
Uranium (MWMT)	M6020 ICP-MS	0.0080		*	mg/L	0.0001	0.0005	12/05/07 9:04	scp
Zinc (MWMT)	M6010B ICP		U	*	mg/L	0.01	0.05	12/06/07 14:43	djt

Soil Preparation

Parameter	EPA Method	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Meteoritic Water	NDEP - MWMT, Sept. 19, 1990								
Mobility Extraction									
Dry Weight		4950			g			11/30/07 0:00	lwt/bjl
Extraction pH		5.7			units			11/30/07 0:00	lwt/bjl
Extraction Time		33.5			hrs			11/30/07 0:00	lwt/bjl
Leachate pH		7.7			units			11/30/07 0:00	lwt/bjl
Leachate Volume		4760			mL			11/30/07 0:00	lwt/bjl
Particle Size over 5 cm		55			%			11/30/07 0:00	lwt/bjl
Retained Moisture		19.8			%			11/30/07 0:00	lwt/bjl

Report Header Explanations

<i>Batch</i>	A distinct set of samples analyzed at a specific time
<i>Found</i>	Value of the QC Type of interest
<i>Limit</i>	Upper limit for RPD, in %.
<i>Lower</i>	Lower Recovery Limit, in % (except for LCSS, mg/Kg)
<i>MDL</i>	Method Detection Limit. Same as Minimum Reporting Limit. Allows for instrument and annual fluctuations.
<i>PCN/SCN</i>	A number assigned to reagents/standards to trace to the manufacturer's certificate of analysis
<i>PQL</i>	Practical Quantitation Limit, typically 5 times the MDL.
<i>QC</i>	True Value of the Control Sample or the amount added to the Spike
<i>Rec</i>	Amount of the true value or spike added recovered, in % (except for LCSS, mg/Kg)
<i>RPD</i>	Relative Percent Difference, calculation used for Duplicate QC Types
<i>Upper</i>	Upper Recovery Limit, in % (except for LCSS, mg/Kg)
<i>Sample</i>	Value of the Sample of interest

QC Sample Types

<i>AS</i>	Analytical Spike (Post Digestion)	<i>LCSWD</i>	Laboratory Control Sample - Water Duplicate
<i>ASD</i>	Analytical Spike (Post Digestion) Duplicate	<i>LFB</i>	Laboratory Fortified Blank
<i>CCB</i>	Continuing Calibration Blank	<i>LFM</i>	Laboratory Fortified Matrix
<i>CCV</i>	Continuing Calibration Verification standard	<i>LFMD</i>	Laboratory Fortified Matrix Duplicate
<i>DUP</i>	Sample Duplicate	<i>LRB</i>	Laboratory Reagent Blank
<i>ICB</i>	Initial Calibration Blank	<i>MS</i>	Matrix Spike
<i>ICV</i>	Initial Calibration Verification standard	<i>MSD</i>	Matrix Spike Duplicate
<i>ICSAB</i>	Inter-element Correction Standard - A plus B solutions	<i>PBS</i>	Prep Blank - Soil
<i>LCSS</i>	Laboratory Control Sample - Soil	<i>PBW</i>	Prep Blank - Water
<i>LCSSD</i>	Laboratory Control Sample - Soil Duplicate	<i>PQV</i>	Practical Quantitation Verification standard
<i>LCSW</i>	Laboratory Control Sample - Water	<i>SDL</i>	Serial Dilution

QC Sample Type Explanations

Blanks	Verifies that there is no or minimal contamination in the prep method or calibration procedure.
Control Samples	Verifies the accuracy of the method, including the prep procedure.
Duplicates	Verifies the precision of the instrument and/or method.
Spikes/Fortified Matrix	Determines sample matrix interferences, if any.
Standard	Verifies the validity of the calibration.

ACZ Qualifiers (Qual)

<i>B</i>	Analyte concentration detected at a value between MDL and PQL.
<i>H</i>	Analysis exceeded method hold time. pH is a field test with an immediate hold time.
<i>U</i>	Analyte was analyzed for but not detected at the indicated MDL

Method References

- (1) EPA 600/4-83-020. Methods for Chemical Analysis of Water and Wastes, March 1983.
- (2) EPA 600/R-93-100. Methods for the Determination of Inorganic Substances in Environmental Samples, August 1993.
- (3) EPA 600/R-94-111. Methods for the Determination of Metals in Environmental Samples - Supplement I, May 1994.
- (5) EPA SW-846. Test Methods for Evaluating Solid Waste, Third Edition with Update III, December 1996.
- (6) Standard Methods for the Examination of Water and Wastewater, 19th edition, 1995.

Comments

- (1) QC results calculated from raw data. Results may vary slightly if the rounded values are used in the calculations.
- (2) Soil, Sludge, and Plant matrices for Inorganic analyses are reported on a dry weight basis.
- (3) Animal matrices for Inorganic analyses are reported on an "as received" basis.

Lisbon Valley Mining Company, LLC

ACZ Project ID: L66277

Project ID:

Antimony (MWMT)

M6020 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec	Lower	Upper	RPD	Limit	Qual
WG237301													
WG237301ICV	ICV	12/05/07 7:36	MS071120-2	.02006		.02011	mg/L	100.2	90	110			
WG237301ICB	ICB	12/05/07 7:41				U	mg/L		-0.0012	0.0012			
WG236912PBS	PBS	12/05/07 7:58				U	mg/L		-0.0012	0.0012			
L66277-01DUP	DUP	12/05/07 8:07			.0018	.00288	mg/L				46.2	20	RA
L66277-02AS	AS	12/05/07 8:16	MS071113-5	.01	U	.00994	mg/L	99.4	75	125			
L66277-02ASD	ASD	12/05/07 8:20	MS071113-5	.01	U	.01012	mg/L	101.2	75	125	1.79	20	

Arsenic (MWMT)

M6010B ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec	Lower	Upper	RPD	Limit	Qual
WG237387													
WG237387ICV	ICV	12/06/07 13:37	II071009-7	4		3.976	mg/L	99.4	90	110			
WG237387ICB	ICB	12/06/07 13:40				U	mg/L		-0.12	0.12			
WG236912PBS	PBS	12/06/07 13:54				U	mg/L		-0.12	0.12			
L66277-01AS	AS	12/06/07 14:03	II071128-2	1	U	1.088	mg/L	108.8	75	125			
L66277-01ASD	ASD	12/06/07 14:07	II071128-2	1	U	1.062	mg/L	106.2	75	125	2.42	20	
L66277-01DUP	DUP	12/06/07 14:10			U	U	mg/L				0	20	RA

Cadmium (MWMT)

M6010B ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec	Lower	Upper	RPD	Limit	Qual
WG237387													
WG237387ICV	ICV	12/06/07 13:37	II071009-7	2		1.9668	mg/L	98.3	90	110			
WG237387ICB	ICB	12/06/07 13:40				U	mg/L		-0.015	0.015			
WG236912PBS	PBS	12/06/07 13:54				U	mg/L		-0.015	0.015			
L66277-01AS	AS	12/06/07 14:03	II071128-2	.5	.006	.507	mg/L	100.2	75	125			
L66277-01ASD	ASD	12/06/07 14:07	II071128-2	.5	.006	.5124	mg/L	101.3	75	125	1.06	20	
L66277-01DUP	DUP	12/06/07 14:10			.006	U	mg/L				200	20	RA

Copper (MWMT)

M6010B ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec	Lower	Upper	RPD	Limit	Qual
WG237387													
WG237387ICV	ICV	12/06/07 13:37	II071009-7	2		2.015	mg/L	100.8	90	110			
WG237387ICB	ICB	12/06/07 13:40				U	mg/L		-0.03	0.03			
WG236912PBS	PBS	12/06/07 13:54				U	mg/L		-0.03	0.03			
L66277-01AS	AS	12/06/07 14:03	II071128-2	.5	.04	.567	mg/L	105.4	75	125			
L66277-01ASD	ASD	12/06/07 14:07	II071128-2	.5	.04	.567	mg/L	105.4	75	125	0	20	
L66277-01DUP	DUP	12/06/07 14:10			.04	.053	mg/L				28	20	RA
WG237526													
WG237526ICV	ICV	12/11/07 21:05	II071009-7	2		1.904	mg/L	95.2	90	110			
WG237526ICB	ICB	12/11/07 21:09				U	mg/L		-0.03	0.03			
WG236912PBS	PBS	12/11/07 21:23				U	mg/L		-0.03	0.03			
L66277-01DUP	DUP	12/11/07 21:34			.04	.05	mg/L				22.2	20	RA
L66528-01AS	AS	12/11/07 22:07	II071128-2	.5	206	191.429	mg/L	-2914.2	75	125			M3
L66528-01ASD	ASD	12/11/07 22:11	II071128-2	.5	206	203.926	mg/L	-414.8	75	125	6.32	20	M3

Lisbon Valley Mining Company, LLC

ACZ Project ID: **L66277**

Project ID:

Molybdenum (MWMT)

M6010B ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec	Lower	Upper	RPD	Limit	Qual
WG237387													
WG237387ICV	ICV	12/06/07 13:37	II071009-7	2		2.013	mg/L	100.7	90	110			
WG237387ICB	ICB	12/06/07 13:40				U	mg/L		-0.03	0.03			
WG236912PBS	PBS	12/06/07 13:54				U	mg/L		-0.03	0.03			
L66277-01AS	AS	12/06/07 14:03	II071128-2	.5	.38	.873	mg/L	98.6	75	125			
L66277-01ASD	ASD	12/06/07 14:07	II071128-2	.5	.38	.875	mg/L	99	75	125	0.23	20	
L66277-01DUP	DUP	12/06/07 14:10			.38	.49	mg/L				25.3	20	RC

Selenium (MWMT)

M6010B ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec	Lower	Upper	RPD	Limit	Qual
WG237387													
WG237387ICV	ICV	12/06/07 13:37	II071009-7	4		4.015	mg/L	100.4	90	110			
WG237387ICB	ICB	12/06/07 13:40				U	mg/L		-0.12	0.12			
WG236912PBS	PBS	12/06/07 13:54				U	mg/L		-0.12	0.12			
L66277-01AS	AS	12/06/07 14:03	II071128-2	1	U	1.027	mg/L	102.7	75	125			
L66277-01ASD	ASD	12/06/07 14:07	II071128-2	1	U	1.037	mg/L	103.7	75	125	0.97	20	
L66277-01DUP	DUP	12/06/07 14:10			U	U	mg/L				0	20	RA

Uranium (MWMT)

M6020 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec	Lower	Upper	RPD	Limit	Qual
WG237301													
WG237301ICV	ICV	12/05/07 7:36	MS071120-2	.05		.04908	mg/L	98.2	90	110			
WG237301ICB	ICB	12/05/07 7:41				U	mg/L		-0.0003	0.0003			
WG236912PBS	PBS	12/05/07 7:58				U	mg/L		-0.0003	0.0003			
L66277-01DUP	DUP	12/05/07 8:07			.015	.01336	mg/L				11.6	20	
L66277-02AS	AS	12/05/07 8:16	MS071113-5	.05	.0013	.04875	mg/L	94.9	75	125			
L66277-02ASD	ASD	12/05/07 8:20	MS071113-5	.05	.0013	.04739	mg/L	92.2	75	125	2.83	20	

Zinc (MWMT)

M6010B ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec	Lower	Upper	RPD	Limit	Qual
WG237387													
WG237387ICV	ICV	12/06/07 13:37	II071009-7	2		1.93	mg/L	96.5	90	110			
WG237387ICB	ICB	12/06/07 13:40				U	mg/L		-0.03	0.03			
WG236912PBS	PBS	12/06/07 13:54				U	mg/L		-0.03	0.03			
L66277-01AS	AS	12/06/07 14:03	II071128-2	.5	U	.53	mg/L	106	75	125			
L66277-01ASD	ASD	12/06/07 14:07	II071128-2	.5	U	.534	mg/L	106.8	75	125	0.75	20	
L66277-01DUP	DUP	12/06/07 14:10			U	U	mg/L				0	20	RA

Lisbon Valley Mining Company, LLC

ACZ Project ID: **L66277**

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L66277-01	WG237301	Antimony (MWMT)	M6020 ICP-MS	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
	WG237387	Arsenic (MWMT)	M6010B ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
		Cadmium (MWMT)	M6010B ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
		Copper (MWMT)	M6010B ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
		Molybdenum (MWMT)	M6010B ICP	RC	For a solid matrix, the matrix duplicate precision assessment (RPD or RER) exceeded the control limit, which is attributable to the non-homogeneity of the sample.
		Selenium (MWMT)	M6010B ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
		Zinc (MWMT)	M6010B ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
L66277-02	WG237301	Antimony (MWMT)	M6020 ICP-MS	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
	WG237387	Arsenic (MWMT)	M6010B ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
		Cadmium (MWMT)	M6010B ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
		Copper (MWMT)	M6010B ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
		Molybdenum (MWMT)	M6010B ICP	RC	For a solid matrix, the matrix duplicate precision assessment (RPD or RER) exceeded the control limit, which is attributable to the non-homogeneity of the sample.
		Selenium (MWMT)	M6010B ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
		Zinc (MWMT)	M6010B ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).

Lisbon Valley Mining Company, LLC**ACZ Project ID: L66277**

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L66277-03	WG237301	Antimony (MWMT)	M6020 ICP-MS	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
	WG237387	Arsenic (MWMT)	M6010B ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
		Cadmium (MWMT)	M6010B ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
	WG237526	Copper (MWMT)	M6010B ICP	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
			M6010B ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
			M6010B ICP	ZG	The ICP Serial Dilution was not used for data validation because the sample concentration was less than 50 times the MDL.
	WG237387	Molybdenum (MWMT)	M6010B ICP	RC	For a solid matrix, the matrix duplicate precision assessment (RPD or RER) exceeded the control limit, which is attributable to the non-homogeneity of the sample.
		Selenium (MWMT)	M6010B ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
		Zinc (MWMT)	M6010B ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
L66277-04	WG237301	Antimony (MWMT)	M6020 ICP-MS	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
	WG237387	Arsenic (MWMT)	M6010B ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
		Cadmium (MWMT)	M6010B ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
		Copper (MWMT)	M6010B ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
		Molybdenum (MWMT)	M6010B ICP	RC	For a solid matrix, the matrix duplicate precision assessment (RPD or RER) exceeded the control limit, which is attributable to the non-homogeneity of the sample.
		Selenium (MWMT)	M6010B ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
		Zinc (MWMT)	M6010B ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).

Lisbon Valley Mining Company, LLC

ACZ Project ID: **L66277**

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L66277-05	WG237301	Antimony (MWMT)	M6020 ICP-MS	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
	WG237387	Arsenic (MWMT)	M6010B ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
		Cadmium (MWMT)	M6010B ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
		Copper (MWMT)	M6010B ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
		Molybdenum (MWMT)	M6010B ICP	RC	For a solid matrix, the matrix duplicate precision assessment (RPD or RER) exceeded the control limit, which is attributable to the non-homogeneity of the sample.
		Selenium (MWMT)	M6010B ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
		Zinc (MWMT)	M6010B ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
L66277-06	WG237301	Antimony (MWMT)	M6020 ICP-MS	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
	WG237387	Arsenic (MWMT)	M6010B ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
		Cadmium (MWMT)	M6010B ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
		Copper (MWMT)	M6010B ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
		Molybdenum (MWMT)	M6010B ICP	RC	For a solid matrix, the matrix duplicate precision assessment (RPD or RER) exceeded the control limit, which is attributable to the non-homogeneity of the sample.
		Selenium (MWMT)	M6010B ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
		Zinc (MWMT)	M6010B ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
L66277-07	WG237301	Antimony (MWMT)	M6020 ICP-MS	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
	WG237387	Arsenic (MWMT)	M6010B ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
		Cadmium (MWMT)	M6010B ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
		Copper (MWMT)	M6010B ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
		Molybdenum (MWMT)	M6010B ICP	RC	For a solid matrix, the matrix duplicate precision assessment (RPD or RER) exceeded the control limit, which is attributable to the non-homogeneity of the sample.
		Selenium (MWMT)	M6010B ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
		Zinc (MWMT)	M6010B ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).

Lisbon Valley Mining Company, LLC

ACZ Project ID: **L66277**

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L66277-08	WG237301	Antimony (MWMT)	M6020 ICP-MS	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
	WG237387	Arsenic (MWMT)	M6010B ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
		Cadmium (MWMT)	M6010B ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
		Copper (MWMT)	M6010B ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
		Molybdenum (MWMT)	M6010B ICP	RC	For a solid matrix, the matrix duplicate precision assessment (RPD or RER) exceeded the control limit, which is attributable to the non-homogeneity of the sample.
		Selenium (MWMT)	M6010B ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
		Zinc (MWMT)	M6010B ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
L66277-09	WG237301	Antimony (MWMT)	M6020 ICP-MS	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
	WG237387	Arsenic (MWMT)	M6010B ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
		Cadmium (MWMT)	M6010B ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
		Copper (MWMT)	M6010B ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
		Molybdenum (MWMT)	M6010B ICP	RC	For a solid matrix, the matrix duplicate precision assessment (RPD or RER) exceeded the control limit, which is attributable to the non-homogeneity of the sample.
		Selenium (MWMT)	M6010B ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
		Zinc (MWMT)	M6010B ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).

Lisbon Valley Mining Company, LLC

ACZ Project ID: **L66277**

Metals Analysis

The following parameters are not offered for certification or are not covered by NELAC certificate #ACZ.

Uranium (MWMT)

M6020 ICP-MS

ACZ Laboratories, Inc.

2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

Sample Receipt

Lisbon Valley Mining Company, LLC

ACZ Project ID: L66277

Date Received: 11/13/2007

Received By:

Date Printed: 11/13/2007

Receipt Verification

	YES	NO	NA
1) Does this project require special handling procedures such as CLP protocol?			X
2) Are the custody seals on the cooler intact?	X		
3) Are the custody seals on the sample containers intact?			X
4) Is there a Chain of Custody or other directive shipping papers present?	X		
5) Is the Chain of Custody complete?	X		
6) Is the Chain of Custody in agreement with the samples received?	X		
7) Is there enough sample for all requested analyses?	X		
8) Are all samples within holding times for requested analyses?	X		
9) Were all sample containers received intact?	X		
10) Are the temperature blanks present?			X
11) Are the trip blanks (VOA and/or Cyanide) present?			X
12) Are samples requiring no headspace, headspace free?			X
13) Do the samples that require a Foreign Soils Permit have one?			X

Exceptions: If you answered no to any of the above questions, please describe

N/A

Contact (For any discrepancies, the client must be contacted)

N/A

Shipping Containers

Cooler Id	Temp (°C)	Rad (µR/hr)
1652	12.1	17
1621	17.6	15
1837	18.6	16

Client must contact ACZ Project Manager if analysis should not proceed for samples received outside of thermal preservation acceptance criteria.

Notes

Lisbon Valley Mining Company, LLC

ACZ Project ID: L66277
Date Received: 11/13/2007
Received By:

Sample Container Preservation

SAMPLE	CLIENT ID	R < 2	G < 2	BK < 2	Y < 2	YG < 2	B < 2	O < 2	T > 12	N/A	RAD	ID
L66277-01	C 6340 B 11-13(A)									X		
L66277-02	C 6340 B 14(B)									X		
L66277-03	C 6340 B 3-5(C)									X		
L66277-04	C 6340 B 6-8(D)									X		
L66277-05	C 6340 B 9-10(E)									X		
L66277-06	C 6340 B 2(F)									X		
L66277-07	SW B 9-10(G)									X		
L66277-08	GTO 6440 B 6-8(H)									X		
L66277-09	GTO 6440 B 2(I)									X		

Sample Container Preservation Legend

Abbreviation	Description	Container Type	Preservative/Limits
R	Raw/Nitric	RED	pH must be < 2
B	Filtered/Sulfuric	BLUE	pH must be < 2
BK	Filtered/Nitric	BLACK	pH must be < 2
G	Filtered/Nitric	GREEN	pH must be < 2
O	Raw/Sulfuric	ORANGE	pH must be < 2
P	Raw/NaOH	PURPLE	pH must be > 12 *
T	Raw/NaOH Zinc Acetate	TAN	pH must be > 12
Y	Raw/Sulfuric	YELLOW	pH must be < 2
YG	Raw/Sulfuric	YELLOW GLASS	pH must be < 2
N/A	No preservative needed	Not applicable	
RAD	Gamma/Beta dose rate	Not applicable	must be < 250 µR/hr

* pH check performed by analyst prior to sample preparation

Sample IDs Reviewed By: _____

L66277

Page 1 of 2

Lisbon Valley Mining Co.

P.O. Box 248
920 S. County Rd. 313
La Sal, Utah 84530
Phone: (435) 686-9950

Chain of Custody Record

Send report with laboratory QA to:

920 S County Rd 313
La Sal, Utah 84530

Lisbon Valley Copper Project

ANALYSES

ACZ Laboratories, Inc.
2773 Downhill Drive
Steamboat Springs, CO
(970) 879-6590

SAMPLE NUMBER**DATE****TIME**

MWMP

Number of
ContainersRemarks / Comments

Cent 6340 Bed 11-13 (A) •	July 07		x								1	Composite samples per suffix (ie. A-J)
Cent 6340 Bed 14 (B) •	July 07		x								1	As Above
Cent 6340 Bed 3-5 (C) •	Aug 07		x								1	As Above
Cent 6320 Bed 11-13 (A) •	Aug 07		x								1	As Above
Cent 6340 Bed 6-8 (D) •	Aug 07		x								1	As Above
Cent 6320 Bed 14 (B) •	Aug 07		x								1	As Above
Cent 6340 Bed 9-10 (E) •	Aug 07		x								1	As Above
Cent 6340 Bed 2 (F) •	Aug 07		x								1	As Above
Sent West Bed 9-10 (G) •	July 07		x								1	As Above
GTO 6440 Bed 6-8 (H) •	Aug 07		x								1	As Above
GTO 6440 Bed 2 (I) •	July 07		x								1	As Above
GTO 6440 Bed 2 (I) •	Aug 07		x								1	As Above
Cent 6320 Bed 9-10 (E) •	Sept 07		x								1	As Above
Cent 6320 Bed 3-5 (C) •	Sept 07		x								1	As Above
Cent 6320 Bed 11-13 (A) •	Sept 07		x								1	As Above
Cent 6340 Bed 6-8 (D) •	Sept 07		x								1	As Above

Sampled By:
Charles Bauer

Total Number of
Containers

16

Sampler's Signature

Contact Person:

Lantz M Indergard

Phone: (435) 686-9950 ext. 226 Fax: (435) 686-2223

Relinquished By:

Date / Time:

Received By:

Date / Time:

Lantz Indergard

11-8-07 3:15

11-8-07 10:17

Method of Shipment:
UPS

Comments:

These samples are to be composited to represent 2nd Qtr 2007.
The letter suffix identifies one analysis of up to 3 samples

[illegible]

March 18, 2008

Report to:

Lantz Indergard
Lisbon Valley Mining Company, LLC
P.O. Box 248
La Sal, UT 84530

Bill to:

Lantz Indergard
Lisbon Valley Mining Company, LLC
P.O. Box 248
La Sal, UT 84530

Project ID:

ACZ Project ID: L67895

Lantz Indergard:

Enclosed are the analytical results for sample(s) submitted to ACZ Laboratories, Inc. (ACZ) on February 28, 2008. This project has been assigned to ACZ's project number, L67895. Please reference this number in all future inquiries.

All analyses were performed according to ACZ's Quality Assurance Plan, version 12.0. The enclosed results relate only to the samples received under L67895. Each section of this report has been reviewed and approved by the appropriate Laboratory Supervisor, or a qualified substitute.

Except as noted, the test results for the methods and parameters listed on ACZ's current NELAC certificate letter (#ACZ) meet all requirements of NELAC.

This report shall be used or copied only in its entirety. ACZ is not responsible for the consequences arising from the use of a partial report.

All samples and sub-samples associated with this project will be disposed of after April 18, 2008. If the samples are determined to be hazardous, additional charges apply for disposal (typically less than \$10/sample). If you would like the samples to be held longer than ACZ's stated policy or to be returned, please contact your Project Manager or Customer Service Representative for further details and associated costs. ACZ retains analytical reports for five years.

If you have any questions or other needs, please contact your Project Manager.



Sue Webber has reviewed and
approved this report.



Lisbon Valley Mining Company, LLC

Project ID:

Sample ID: CENT 6280 BED 14(A)

ACZ Sample ID: **L67895-01**

Date Sampled: 10/01/07 00:00

Date Received: 02/28/08

Sample Matrix: Soil

Metals Analysis

Parameter	EPA Method	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Antimony (MWMT)	M6020 ICP-MS		U	*	mg/L	0.0004	0.002	03/18/08 4:35	gme
Arsenic (MWMT)	M6010B ICP		U	*	mg/L	0.08	0.4	03/17/08 13:53	aeh/erf
Cadmium (MWMT)	M6010B ICP		U	*	mg/L	0.005	0.02	03/13/08 10:40	aeh/erf
Copper (MWMT)	M6010B ICP		U	*	mg/L	0.01	0.05	03/13/08 10:40	aeh/erf
Molybdenum (MWMT)	M6010B ICP		U	*	mg/L	0.01	0.05	03/13/08 10:40	aeh/erf
Selenium (MWMT)	M6010B ICP		U	*	mg/L	0.04	0.2	03/13/08 10:40	aeh/erf
Uranium (MWMT)	M6020 ICP-MS	0.0052		*	mg/L	0.0001	0.0005	03/18/08 4:35	gme
Zinc (MWMT)	M6010B ICP		U	*	mg/L	0.01	0.05	03/13/08 10:40	aeh/erf

Soil Preparation

Parameter	EPA Method	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Meteoritic Water	NDEP - MWMT, Sept. 19, 1990								
Mobility Extraction									
Dry Weight		5070			g			03/10/08 0:00	lwt/bjl
Extraction pH		6			units			03/10/08 0:00	lwt/bjl
Extraction Time		27			hrs			03/10/08 0:00	lwt/bjl
Leachate pH		7.3			units			03/10/08 0:00	lwt/bjl
Leachate Volume		5120			mL			03/10/08 0:00	lwt/bjl
Particle Size over 5 cm		68.7			%			03/10/08 0:00	lwt/bjl
Retained Moisture		12.9			%			03/10/08 0:00	lwt/bjl

Lisbon Valley Mining Company, LLC

Project ID:

Sample ID: CENT 6300 BED 6-8(B)

ACZ Sample ID: **L67895-02**

Date Sampled: 10/01/07 00:00

Date Received: 02/28/08

Sample Matrix: Soil

Metals Analysis

Parameter	EPA Method	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Antimony (MWMt)	M6020 ICP-MS		U	*	mg/L	0.0004	0.002	03/18/08 4:49	gme
Arsenic (MWMt)	M6010B ICP		U	*	mg/L	0.04	0.2	03/13/08 10:56	aeh/erf
Cadmium (MWMt)	M6010B ICP	0.434		*	mg/L	0.005	0.02	03/13/08 10:56	aeh/erf
Copper (MWMt)	M6010B ICP	2.32		*	mg/L	0.01	0.05	03/13/08 10:56	aeh/erf
Molybdenum (MWMt)	M6010B ICP		U	*	mg/L	0.01	0.05	03/13/08 10:56	aeh/erf
Selenium (MWMt)	M6010B ICP	0.04	B	*	mg/L	0.04	0.2	03/13/08 10:56	aeh/erf
Uranium (MWMt)	M6020 ICP-MS	0.0007		*	mg/L	0.0001	0.0005	03/18/08 4:49	gme
Zinc (MWMt)	M6010B ICP	2.35			mg/L	0.01	0.05	03/13/08 10:56	aeh/erf

Soil Preparation

Parameter	EPA Method	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Meteoric Water	NDEP - MWMt, Sept. 19, 1990								
Mobility Extraction									
Dry Weight		5000			g			03/11/08 0:00	lwt/bjl
Extraction pH		6			units			03/11/08 0:00	lwt/bjl
Extraction Time		29			hrs			03/11/08 0:00	lwt/bjl
Leachate pH		4.68			units			03/11/08 0:00	lwt/bjl
Leachate Volume		4950			mL			03/11/08 0:00	lwt/bjl
Particle Size over 5 cm		59.5			%			03/11/08 0:00	lwt/bjl
Retained Moisture		20.9			%			03/11/08 0:00	lwt/bjl

Lisbon Valley Mining Company, LLC

Project ID:

Sample ID: CENT 6300 BED 3-5(C)

ACZ Sample ID: **L67895-03**

Date Sampled: 10/01/07 00:00

Date Received: 02/28/08

Sample Matrix: Soil

Metals Analysis

Parameter	EPA Method	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Antimony (MWMt)	M6020 ICP-MS		U	*	mg/L	0.0004	0.002	03/18/08 4:57	gme
Arsenic (MWMt)	M6010B ICP		U	*	mg/L	0.04	0.2	03/13/08 11:09	aeh/erf
Cadmium (MWMt)	M6010B ICP	0.325		*	mg/L	0.005	0.02	03/13/08 11:09	aeh/erf
Copper (MWMt)	M6010B ICP	0.07		*	mg/L	0.01	0.05	03/13/08 11:09	aeh/erf
Molybdenum (MWMt)	M6010B ICP	0.01	B	*	mg/L	0.01	0.05	03/13/08 11:09	aeh/erf
Selenium (MWMt)	M6010B ICP		U	*	mg/L	0.04	0.2	03/13/08 11:09	aeh/erf
Uranium (MWMt)	M6020 ICP-MS	0.0019		*	mg/L	0.0001	0.0005	03/18/08 4:57	gme
Zinc (MWMt)	M6010B ICP	0.31			mg/L	0.01	0.05	03/13/08 11:09	aeh/erf

Soil Preparation

Parameter	EPA Method	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Meteoritic Water	NDEP - MWMt, Sept. 19, 1990								
Mobility Extraction									
Dry Weight		5080			g			03/11/08 0:00	lwt/bjl
Extraction pH		6			units			03/11/08 0:00	lwt/bjl
Extraction Time		31.5			hrs			03/11/08 0:00	lwt/bjl
Leachate pH		6.7			units			03/11/08 0:00	lwt/bjl
Leachate Volume		5110			mL			03/11/08 0:00	lwt/bjl
Particle Size over 5 cm		60.5			%			03/11/08 0:00	lwt/bjl
Retained Moisture		12.9			%			03/11/08 0:00	lwt/bjl

Lisbon Valley Mining Company, LLC

Project ID:

Sample ID: CENT 6300 BED 11-13D

ACZ Sample ID: **L67895-04**

Date Sampled: 10/01/07 00:00

Date Received: 02/28/08

Sample Matrix: Soil

Metals Analysis

Parameter	EPA Method	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Antimony (MWMT)	M6020 ICP-MS	0.0005	B	*	mg/L	0.0004	0.002	03/18/08 5:19	gme
Arsenic (MWMT)	M6010B ICP		U	*	mg/L	0.08	0.4	03/17/08 14:10	aeh/erf
Cadmium (MWMT)	M6010B ICP	0.012	B	*	mg/L	0.005	0.02	03/13/08 11:12	aeh/erf
Copper (MWMT)	M6010B ICP	0.03	B	*	mg/L	0.01	0.05	03/13/08 11:12	aeh/erf
Molybdenum (MWMT)	M6010B ICP	0.01	B	*	mg/L	0.01	0.05	03/13/08 11:12	aeh/erf
Selenium (MWMT)	M6010B ICP		U	*	mg/L	0.04	0.2	03/13/08 11:12	aeh/erf
Uranium (MWMT)	M6020 ICP-MS	0.0048		*	mg/L	0.0001	0.0005	03/18/08 5:19	gme
Zinc (MWMT)	M6010B ICP	0.58			mg/L	0.01	0.05	03/13/08 11:12	aeh/erf

Soil Preparation

Parameter	EPA Method	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Meteoric Water	NDEP - MWMT, Sept. 19, 1990								
Mobility Extraction									
Dry Weight		5060			g			03/12/08 0:00	lwt/bjl
Extraction pH		6			units			03/12/08 0:00	lwt/bjl
Extraction Time		29			hrs			03/12/08 0:00	lwt/bjl
Leachate pH		6.9			units			03/12/08 0:00	lwt/bjl
Leachate Volume		5020			mL			03/12/08 0:00	lwt/bjl
Particle Size over 5 cm		63.7			%			03/12/08 0:00	lwt/bjl
Retained Moisture		16.1			%			03/12/08 0:00	lwt/bjl

Lisbon Valley Mining Company, LLC

Project ID:

Sample ID: CENT 6300 BED 9-10(E)

ACZ Sample ID: **L67895-05**

Date Sampled: 10/01/07 00:00

Date Received: 02/28/08

Sample Matrix: Soil

Metals Analysis

Parameter	EPA Method	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Antimony (MWMT)	M6020 ICP-MS	0.0011	B	*	mg/L	0.0004	0.002	03/18/08 5:24	gme
Arsenic (MWMT)	M6010B ICP		U	*	mg/L	0.08	0.4	03/17/08 14:13	aeh/erf
Cadmium (MWMT)	M6010B ICP	0.126		*	mg/L	0.005	0.02	03/13/08 11:16	aeh/erf
Copper (MWMT)	M6010B ICP	0.27		*	mg/L	0.01	0.05	03/13/08 11:16	aeh/erf
Molybdenum (MWMT)	M6010B ICP	0.08		*	mg/L	0.01	0.05	03/13/08 11:16	aeh/erf
Selenium (MWMT)	M6010B ICP		U	*	mg/L	0.04	0.2	03/13/08 11:16	aeh/erf
Uranium (MWMT)	M6020 ICP-MS	0.0211		*	mg/L	0.0001	0.0005	03/18/08 5:24	gme
Zinc (MWMT)	M6010B ICP	0.40			mg/L	0.01	0.05	03/13/08 11:16	aeh/erf

Soil Preparation

Parameter	EPA Method	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Meteoritic Water	NDEP - MWMT, Sept. 19, 1990								
Mobility Extraction									
Dry Weight		5000			g			03/12/08 0:00	lwt/bjl
Extraction pH		6			units			03/12/08 0:00	lwt/bjl
Extraction Time		31.5			hrs			03/12/08 0:00	lwt/bjl
Leachate pH		6.7			units			03/12/08 0:00	lwt/bjl
Leachate Volume		5130			mL			03/12/08 0:00	lwt/bjl
Particle Size over 5 cm		62.3			%			03/12/08 0:00	lwt/bjl
Retained Moisture		20.8			%			03/12/08 0:00	lwt/bjl

ACZ Laboratories, Inc.

2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

Inorganic Analytical Results

Lisbon Valley Mining Company, LLC

Project ID:

Sample ID: CENT 6460 BED 2(F)

ACZ Sample ID: **L67895-06**

Date Sampled: 11/01/07 00:00

Date Received: 02/28/08

Sample Matrix: Soil

Metals Analysis

Parameter	EPA Method	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Antimony (MWMT)	M6020 ICP-MS		U	*	mg/L	0.0004	0.002	03/18/08 5:28	gme
Arsenic (MWMT)	M6010B ICP		U	*	mg/L	0.04	0.2	03/13/08 11:19	aeh/erf
Cadmium (MWMT)	M6010B ICP		U	*	mg/L	0.005	0.02	03/13/08 11:19	aeh/erf
Copper (MWMT)	M6010B ICP		U	*	mg/L	0.01	0.05	03/13/08 11:19	aeh/erf
Molybdenum (MWMT)	M6010B ICP	0.03	B	*	mg/L	0.01	0.05	03/13/08 11:19	aeh/erf
Selenium (MWMT)	M6010B ICP	0.07	B	*	mg/L	0.04	0.2	03/13/08 11:19	aeh/erf
Uranium (MWMT)	M6020 ICP-MS	0.0165		*	mg/L	0.0001	0.0005	03/18/08 5:28	gme
Zinc (MWMT)	M6010B ICP		U		mg/L	0.01	0.05	03/13/08 11:19	aeh/erf

Soil Preparation

Parameter	EPA Method	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Meteoric Water	NDEP - MWMT, Sept. 19, 1990								
Mobility Extraction									
Dry Weight		5020			g			03/12/08 0:00	lwt/bjl
Extraction pH		6			units			03/12/08 0:00	lwt/bjl
Extraction Time		31.5			hrs			03/12/08 0:00	lwt/bjl
Leachate pH		7.1			units			03/12/08 0:00	lwt/bjl
Leachate Volume		4900			mL			03/12/08 0:00	lwt/bjl
Particle Size over 5 cm		63.4			%			03/12/08 0:00	lwt/bjl
Retained Moisture		22.4			%			03/12/08 0:00	lwt/bjl

Report Header Explanations

<i>Batch</i>	A distinct set of samples analyzed at a specific time
<i>Found</i>	Value of the QC Type of interest
<i>Limit</i>	Upper limit for RPD, in %.
<i>Lower</i>	Lower Recovery Limit, in % (except for LCSS, mg/Kg)
<i>MDL</i>	Method Detection Limit. Same as Minimum Reporting Limit. Allows for instrument and annual fluctuations.
<i>PCN/SCN</i>	A number assigned to reagents/standards to trace to the manufacturer's certificate of analysis
<i>PQL</i>	Practical Quantitation Limit, typically 5 times the MDL.
<i>QC</i>	True Value of the Control Sample or the amount added to the Spike
<i>Rec</i>	Amount of the true value or spike added recovered, in % (except for LCSS, mg/Kg)
<i>RPD</i>	Relative Percent Difference, calculation used for Duplicate QC Types
<i>Upper</i>	Upper Recovery Limit, in % (except for LCSS, mg/Kg)
<i>Sample</i>	Value of the Sample of interest

QC Sample Types

<i>AS</i>	Analytical Spike (Post Digestion)	<i>LCSWD</i>	Laboratory Control Sample - Water Duplicate
<i>ASD</i>	Analytical Spike (Post Digestion) Duplicate	<i>LFB</i>	Laboratory Fortified Blank
<i>CCB</i>	Continuing Calibration Blank	<i>LFM</i>	Laboratory Fortified Matrix
<i>CCV</i>	Continuing Calibration Verification standard	<i>LFMD</i>	Laboratory Fortified Matrix Duplicate
<i>DUP</i>	Sample Duplicate	<i>LRB</i>	Laboratory Reagent Blank
<i>ICB</i>	Initial Calibration Blank	<i>MS</i>	Matrix Spike
<i>ICV</i>	Initial Calibration Verification standard	<i>MSD</i>	Matrix Spike Duplicate
<i>ICSAB</i>	Inter-element Correction Standard - A plus B solutions	<i>PBS</i>	Prep Blank - Soil
<i>LCSS</i>	Laboratory Control Sample - Soil	<i>PBW</i>	Prep Blank - Water
<i>LCSSD</i>	Laboratory Control Sample - Soil Duplicate	<i>PQV</i>	Practical Quantitation Verification standard
<i>LCSW</i>	Laboratory Control Sample - Water	<i>SDL</i>	Serial Dilution

QC Sample Type Explanations

Blanks	Verifies that there is no or minimal contamination in the prep method or calibration procedure.
Control Samples	Verifies the accuracy of the method, including the prep procedure.
Duplicates	Verifies the precision of the instrument and/or method.
Spikes/Fortified Matrix	Determines sample matrix interferences, if any.
Standard	Verifies the validity of the calibration.

ACZ Qualifiers (Qual)

B	Analyte concentration detected at a value between MDL and PQL.
H	Analysis exceeded method hold time. pH is a field test with an immediate hold time.
U	Analyte was analyzed for but not detected at the indicated MDL.

Method References

- (1) EPA 600/4-83-020. Methods for Chemical Analysis of Water and Wastes, March 1983.
- (2) EPA 600/R-93-100. Methods for the Determination of Inorganic Substances in Environmental Samples, August 1993.
- (3) EPA 600/R-94-111. Methods for the Determination of Metals in Environmental Samples - Supplement I, May 1994.
- (5) EPA SW-846. Test Methods for Evaluating Solid Waste, Third Edition with Update III, December 1996.
- (6) Standard Methods for the Examination of Water and Wastewater, 19th edition, 1995.

Comments

- (1) QC results calculated from raw data. Results may vary slightly if the rounded values are used in the calculations.
- (2) Soil, Sludge, and Plant matrices for Inorganic analyses are reported on a dry weight basis.
- (3) Animal matrices for Inorganic analyses are reported on an "as received" basis.

Lisbon Valley Mining Company, LLC

ACZ Project ID: **L67895**

Project ID:

Antimony (MWMT)**M6020 ICP-MS**

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec	Lower	Upper	RPD	Limit	Qual
WG241635													
WG241635ICV	ICV	03/18/08 4:09	MS080304-2	.02006		.01995	mg/L	99.5	90	110			
WG241635ICB	ICB	03/18/08 4:14				U	mg/L		-0.0012	0.0012			
L67895-01DUP	DUP	03/18/08 4:44			U	U	mg/L				0	20	RA
L67895-02DUP	DUP	03/18/08 4:53			U	U	mg/L				0	20	RA
L67895-03AS	AS	03/18/08 5:10	MS080303-5	.01	U	.00978	mg/L	97.8	75	125			
L67895-03ASD	ASD	03/18/08 5:15	MS080303-5	.01	U	.00993	mg/L	99.3	75	125	1.52	20	

Arsenic (MWMT)**M6010B ICP**

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec	Lower	Upper	RPD	Limit	Qual
WG241482													
WG241482ICV	ICV	03/13/08 10:23	II080115-3	4		4.004	mg/L	100.1	90	110			
WG241482ICB	ICB	03/13/08 10:26				U	mg/L		-0.12	0.12			
L67895-01AS	AS	03/13/08 10:46	II080312-2	1		.951	mg/L	95.1	75	125			
L67895-01ASD	ASD	03/13/08 10:49	II080312-2	1		.961	mg/L	96.1	75	125	1.05	20	
L67895-01DUP	DUP	03/13/08 10:53				U	mg/L				0	20	RA
L67895-02DUP	DUP	03/13/08 10:59			U	U	mg/L				0	20	RA

WG241545

WG241545ICV	ICV	03/17/08 13:37	II080115-3	4		4.123	mg/L	103.1	90	110			
WG241545ICB	ICB	03/17/08 13:40				U	mg/L		-0.12	0.12			
L67895-01AS	AS	03/17/08 14:00	II080312-2	2	U	2.285	mg/L	114.3	75	125			
L67895-01ASD	ASD	03/17/08 14:03	II080312-2	2	U	2.353	mg/L	117.7	75	125	2.93	20	
L67895-01DUP	DUP	03/17/08 14:06			U	U	mg/L				0	20	RA

Cadmium (MWMT)**M6010B ICP**

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec	Lower	Upper	RPD	Limit	Qual
WG241482													
WG241482ICV	ICV	03/13/08 10:23	II080115-3	2		1.9322	mg/L	96.6	90	110			
WG241482ICB	ICB	03/13/08 10:26				U	mg/L		-0.015	0.015			
L67895-01AS	AS	03/13/08 10:46	II080312-2	.5	U	.4986	mg/L	99.7	75	125			
L67895-01ASD	ASD	03/13/08 10:49	II080312-2	.5	U	.4977	mg/L	99.5	75	125	0.18	20	
L67895-01DUP	DUP	03/13/08 10:53			U	U	mg/L				0	20	RA
L67895-02DUP	DUP	03/13/08 10:59			.434	.64	mg/L				38.4	20	RD

Copper (MWMT)**M6010B ICP**

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec	Lower	Upper	RPD	Limit	Qual
WG241482													
WG241482ICV	ICV	03/13/08 10:23	II080115-3	2		1.946	mg/L	97.3	90	110			
WG241482ICB	ICB	03/13/08 10:26				U	mg/L		-0.03	0.03			
L67895-01AS	AS	03/13/08 10:46	II080312-2	.5	U	.495	mg/L	99	75	125			
L67895-01ASD	ASD	03/13/08 10:49	II080312-2	.5	U	.494	mg/L	98.8	75	125	0.2	20	
L67895-01DUP	DUP	03/13/08 10:53			U	U	mg/L				0	20	RA
L67895-02DUP	DUP	03/13/08 10:59			2.32	3.4	mg/L				37.8	20	RD

Lisbon Valley Mining Company, LLC

ACZ Project ID: **L67895**

Project ID:

Molybdenum (MWMT)**M6010B ICP**

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec	Lower	Upper	RPD	Limit	Qual
WG241482													
WG241482ICV	ICV	03/13/08 10:23	II080115-3	2		1.941	mg/L	97.1	90	110			
WG241482ICB	ICB	03/13/08 10:26				U	mg/L		-0.03	0.03			
L67895-01AS	AS	03/13/08 10:46	II080312-2	.5	U	.494	mg/L	98.8	75	125			
L67895-01ASD	ASD	03/13/08 10:49	II080312-2	.5	U	.487	mg/L	97.4	75	125	1.43	20	
L67895-01DUP	DUP	03/13/08 10:53			U	U	mg/L				0	20	RA
L67895-02DUP	DUP	03/13/08 10:59			U	U	mg/L				0	20	RA

Selenium (MWMT)**M6010B ICP**

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec	Lower	Upper	RPD	Limit	Qual
WG241482													
WG241482ICV	ICV	03/13/08 10:23	II080115-3	4		3.984	mg/L	99.6	90	110			
WG241482ICB	ICB	03/13/08 10:26				U	mg/L		-0.12	0.12			
L67895-01AS	AS	03/13/08 10:46	II080312-2	1	U	1.064	mg/L	106.4	75	125			
L67895-01ASD	ASD	03/13/08 10:49	II080312-2	1	U	1.079	mg/L	107.9	75	125	1.4	20	
L67895-01DUP	DUP	03/13/08 10:53			U	U	mg/L				0	20	RA
L67895-02DUP	DUP	03/13/08 10:59			.04	U	mg/L				0	20	RA

Uranium (MWMT)**M6020 ICP-MS**

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec	Lower	Upper	RPD	Limit	Qual
WG241635													
WG241635ICV	ICV	03/18/08 4:09	MS080304-2	.05		.04642	mg/L	92.8	90	110			
WG241635ICB	ICB	03/18/08 4:14				U	mg/L		-0.0003	0.0003			
L67895-01DUP	DUP	03/18/08 4:44			.0052	.00592	mg/L				12.9	20	
L67895-02DUP	DUP	03/18/08 4:53			.0007	.00152	mg/L				73.9	20	RA
L67895-03AS	AS	03/18/08 5:10	MS080303-5	.05	.0019	.05103	mg/L	98.3	75	125			
L67895-03ASD	ASD	03/18/08 5:15	MS080303-5	.05	.0019	.05011	mg/L	96.4	75	125	1.82	20	

Zinc (MWMT)**M6010B ICP**

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec	Lower	Upper	RPD	Limit	Qual
WG241482													
WG241482ICV	ICV	03/13/08 10:23	II080115-3	2		1.938	mg/L	96.9	90	110			
WG241482ICB	ICB	03/13/08 10:26				U	mg/L		-0.03	0.03			
L67895-01AS	AS	03/13/08 10:46	II080312-2	.5	U	.539	mg/L	107.8	75	125			
L67895-01ASD	ASD	03/13/08 10:49	II080312-2	.5	U	.539	mg/L	107.8	75	125	0	20	
L67895-01DUP	DUP	03/13/08 10:53			U	U	mg/L				0	20	RA
L67895-02DUP	DUP	03/13/08 10:59			2.35	2.8	mg/L				17.5	20	

Lisbon Valley Mining Company, LLC

ACZ Project ID: **L67895**

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L67895-01	WG241635	Antimony (MWMT)	M6020 ICP-MS	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
	WG241545	Arsenic (MWMT)	M6010B ICP	DB	Sample required dilution due to low bias result.
			M6010B ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
	WG241482	Cadmium (MWMT)	M6010B ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
		Copper (MWMT)	M6010B ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
		Molybdenum (MWMT)	M6010B ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
		Selenium (MWMT)	M6010B ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
		Zinc (MWMT)	M6010B ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
L67895-02	WG241635	Antimony (MWMT)	M6020 ICP-MS	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
	WG241482	Arsenic (MWMT)	M6010B ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
		Cadmium (MWMT)	M6010B ICP	RD	For a solid matrix, the duplicate RPD (spike or matrix) exceeded the control limit, which is attributable to the non-homogeneity of the sample.
		Copper (MWMT)	M6010B ICP	RD	For a solid matrix, the duplicate RPD (spike or matrix) exceeded the control limit, which is attributable to the non-homogeneity of the sample.
	WG241482	Molybdenum (MWMT)	M6010B ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
		Selenium (MWMT)	M6010B ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
		Uranium (MWMT)	M6020 ICP-MS	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
L67895-03	WG241635	Antimony (MWMT)	M6020 ICP-MS	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
	WG241482	Arsenic (MWMT)	M6010B ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
		Cadmium (MWMT)	M6010B ICP	RD	For a solid matrix, the duplicate RPD (spike or matrix) exceeded the control limit, which is attributable to the non-homogeneity of the sample.
		Copper (MWMT)	M6010B ICP	RD	For a solid matrix, the duplicate RPD (spike or matrix) exceeded the control limit, which is attributable to the non-homogeneity of the sample.
	WG241482	Molybdenum (MWMT)	M6010B ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
		Selenium (MWMT)	M6010B ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
		Uranium (MWMT)	M6020 ICP-MS	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).

Lisbon Valley Mining Company, LLC

ACZ Project ID: **L67895**

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L67895-04	WG241635	Antimony (MWMt)	M6020 ICP-MS	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
	WG241545	Arsenic (MWMt)	M6010B ICP	DB	Sample required dilution due to low bias result.
			M6010B ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
	WG241482	Cadmium (MWMt)	M6010B ICP	RD	For a solid matrix, the duplicate RPD (spike or matrix) exceeded the control limit, which is attributable to the non-homogeneity of the sample.
		Copper (MWMt)	M6010B ICP	RD	For a solid matrix, the duplicate RPD (spike or matrix) exceeded the control limit, which is attributable to the non-homogeneity of the sample.
		Molybdenum (MWMt)	M6010B ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
		Selenium (MWMt)	M6010B ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
	WG241635	Uranium (MWMt)	M6020 ICP-MS	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
L67895-05	WG241635	Antimony (MWMt)	M6020 ICP-MS	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
	WG241545	Arsenic (MWMt)	M6010B ICP	DB	Sample required dilution due to low bias result.
			M6010B ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
	WG241482	Cadmium (MWMt)	M6010B ICP	RD	For a solid matrix, the duplicate RPD (spike or matrix) exceeded the control limit, which is attributable to the non-homogeneity of the sample.
		Copper (MWMt)	M6010B ICP	RD	For a solid matrix, the duplicate RPD (spike or matrix) exceeded the control limit, which is attributable to the non-homogeneity of the sample.
		Molybdenum (MWMt)	M6010B ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
		Selenium (MWMt)	M6010B ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
	WG241635	Uranium (MWMt)	M6020 ICP-MS	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).

Lisbon Valley Mining Company, LLC

ACZ Project ID: L67895

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L67895-06	WG241635	Antimony (MWMT)	M6020 ICP-MS	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
	WG241482	Arsenic (MWMT)	M6010B ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
		Cadmium (MWMT)	M6010B ICP	RD	For a solid matrix, the duplicate RPD (spike or matrix) exceeded the control limit, which is attributable to the non-homogeneity of the sample.
		Copper (MWMT)	M6010B ICP	RD	For a solid matrix, the duplicate RPD (spike or matrix) exceeded the control limit, which is attributable to the non-homogeneity of the sample.
		Molybdenum (MWMT)	M6010B ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
		Selenium (MWMT)	M6010B ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).
	WG241635	Uranium (MWMT)	M6020 ICP-MS	RA	Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).

Lisbon Valley Mining Company, LLC

ACZ Project ID: **L67895**

Metals Analysis

The following parameters are not offered for certification or are not covered by NELAC certificate #ACZ.

Uranium (MWMt)

M6020 ICP-MS

Lisbon Valley Mining Company, LLC

ACZ Project ID: L67895
Date Received: 2/28/2008
Received By:
Date Printed: 2/28/2008

Receipt Verification

	YES	NO	NA
1) Does this project require special handling procedures such as CLP protocol?			X
2) Are the custody seals on the cooler intact?			X
3) Are the custody seals on the sample containers intact?			X
4) Is there a Chain of Custody or other directive shipping papers present?	X		
5) Is the Chain of Custody complete?	X		
6) Is the Chain of Custody in agreement with the samples received?	X		
7) Is there enough sample for all requested analyses?	X		
8) Are all samples within holding times for requested analyses?	X		
9) Were all sample containers received intact?	X		
10) Are the temperature blanks present?			X
11) Are the trip blanks (VOA and/or Cyanide) present?			X
12) Are samples requiring no headspace, headspace free?			X
13) Do the samples that require a Foreign Soils Permit have one?			X

Exceptions: If you answered no to any of the above questions, please describe

N/A

Contact (For any discrepancies, the client must be contacted)

N/A

Shipping Containers

Cooler Id	Temp (°C)	Rad (µR/hr)
2136	15.2	17
2139	14	17
2138	15.1	16

Client must contact ACZ Project Manager if analysis should not proceed for samples received outside of thermal preservation acceptance criteria.

Notes

Lisbon Valley Mining Company, LLC

ACZ Project ID: L67895
Date Received: 2/28/2008
Received By:

Sample Container Preservation

SAMPLE	CLIENT ID	R < 2	G < 2	BK < 2	Y < 2	YG < 2	B < 2	O < 2	T > 12	N/A	RAD	ID
L67895-01	CENT 6280 BED 14(A)									X		
L67895-02	CENT 6300 BED 6-8(B)									X		
L67895-03	CENT 6300 BED 3-5(C)									X		
L67895-04	CENT 6300 BED 11-13D									X		
L67895-05	CENT 6300 BED 9-10(E)									X		
L67895-06	CENT 6460 BED 2(F)									X		

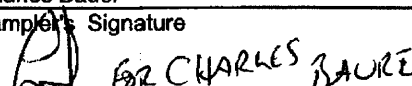
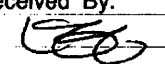
Sample Container Preservation Legend

Abbreviation	Description	Container Type	Preservative/Limits
R	Raw/Nitric	RED	pH must be < 2
B	Filtered/Sulfuric	BLUE	pH must be < 2
BK	Filtered/Nitric	BLACK	pH must be < 2
G	Filtered/Nitric	GREEN	pH must be < 2
O	Raw/Sulfuric	ORANGE	pH must be < 2
P	Raw/NaOH	PURPLE	pH must be > 12 *
T	Raw/NaOH Zinc Acetate	TAN	pH must be > 12
Y	Raw/Sulfuric	YELLOW	pH must be < 2
YG	Raw/Sulfuric	YELLOW GLASS	pH must be < 2
N/A	No preservative needed	Not applicable	
RAD	Gamma/Beta dose rate	Not applicable	must be < 250 µR/hr

* pH check performed by analyst prior to sample preparation

Sample IDs Reviewed By: _____

L67895

Lisbon Valley Mining Co. P.O. Box 248 920 S. County Rd. 313 La Sal, Utah 84530 Phone: (435) 686-9950				Chain of Custody Record Send report with laboratory QA to: 920 S County Rd 313 La Sal, Utah 84530				
Lisbon Valley Copper Project			ANALYSES			Number of Containers	ACZ Laboratories, Inc. 2773 Downhill Drive Steamboat Springs, CO (970) 879-6590	
SAMPLE NUMBER	DATE	TIME	MWMP					
1. Cent 6280 Bed 14 (A)	Oct 07		x					1 Composite samples per suffix (ie. A-F)
2. Cent 6300 Bed 6-8 (B)	Oct 07		x					1 As Above
3. Cent 6300 Bed 3-5 (C)	Oct 07		x					1 As Above
4. Cent 6300 Bed 11-13 (D)	Oct 07		x					1 As Above
5. Cent 6300 Bed 9-10 (E)	Oct 07		x					1 As Above
1. Cent 6280 Bed 14 (A)	Nov 07		x					1 As Above
4. Cent 6280 Bed 11-13 (D)	Nov 07		x					1 As Above
5. Cent 6460 Bed 9-10 (E)	Nov 07		x					1 As Above
2. Cent 6460 Bed 6-8 (B)	Nov 07		x					1 As Above
6. Cent 6460 Bed 2 (F)	Nov 07		x					1 As Above
6. Cent 6460 Bed 2 (F)	Dec 07		x					1 As Above
2. Cent 6460 Bed 6-8 (B)	Dec 07		x					1 As Above
3. Cent 6460 Bed 3-5 (C)	Dec 07		x					1 As Above
4. Cent 6440 Bed 11-13 (D)	Dec 07		x					1 As Above
5. Cent 6240 Bed 14 (A)	Dec 07		x					1 As Above
Cent 6460 Bed 9-10 (E)	Dec 07		x					1 As Above
Sampled By: Charles Bauer			Total Number of Containers			16		
Sample Signature 			Contact Person: Lantz M Indergard Phone: (435) 686-9950 ext. 226 Fax: (435) 686-2223					
Relinquished By: Lantz Indergard			Date / Time: 2/26/08			Received By:  Date / Time: 2-28-08 11:11		
Method of Shipment: UPS			Comments: These samples are to be composited to represent 2nd Qtr 2007. The letter suffix identifies one analysis of up to 3 samples					

Appendix B

2007
Centennial Pit
Geologic Map
Scale: 1" = 250 feet

Lisbon Valley Mining Co., LLC

